

EPA Registration File No. 83250-43

PROCESSING REQUEST

Reg # 83520-43

Decision # 520714

Description: New End Use Product

Electronic Label & Letter
(see PPLS):

OR

Non Electronic
Label & Letter
(Scanning required):

12/29/16 Dated:

☐ Dated:

Only one label type should be selected

Other Materials Sent (see jacket):

8/16/2016 New CSF(s) Dated:

☐ Other:

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: Jessica Rogala

Division: RD/IVB3

Phone: 703-347-0263

Date:



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:

X Registration

EPA Reg. Number:

83520-43

Date of Issuance:

12/29/16

Term of Issuance:

Conditional

Name of Pesticide Product:

Tacoma Ag Imidacloprid 4.0

Name and Address of Registrant (include ZIP Code):

Michael Kellogg, Agent for Tacoma Ag, LLC
c/o Pyxis Regulatory Consulting Inc.
4110 136th St. Ct. NW
Gig Harbor, WA 98332

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Venus Eagle

Venus Eagle, Product Manager 01
Invertebrate & Vertebrate Branch 3
Registration Division (7505P)
Office of Pesticide Programs

Date:

12/29/16

2. You are required to comply with the data requirements described in the DCI or EDSP Order identified below:
 - a. Imidacloprid GDCI-129099-951
 - b. Imidacloprid EDSP-129099

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI or EDSP Order listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division:
<http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
4. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 83520-43."
5. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 08/16/2016

If you have any questions, please contact Jessica Rogala by phone at 703-347-0263, or via email at rogala.jessica@epa.gov.

ACCEPTED

Dec 29, 2016

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 83520-43

[Note to reviewer: [Text] in brackets denotes optional text].

[Note to reviewer: {Text} in braces denotes where in the final label text will appear].

Tacoma Ag Imidacloprid 4.0

GROUP 4A INSECTICIDE

ACTIVE INGREDIENT:

Imidacloprid: 1-[[6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine 40.7%

OTHER INGREDIENTS 59.3%

TOTAL 100.0%

Contains 4.0 pounds of imidacloprid per gallon.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

SHAKE WELL BEFORE USING

See inside label booklet for additional Precautionary Statements and Directions for Use.

EPA Reg. No. 83520-xx

EPA Est. No.

Net Contents:

Batch Code:

Manufactured for:

Tacoma Ag, LLC
P.O. Box 14073
Durham, NC 27709

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
Note to Physician: No specific antidote is available. Treat the patient symptomatically.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid breathing vapor or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long sleeved shirt and long pants,
- Chemical resistant gloves made of nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, barrier laminate ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils or viton ≥ 14 mils,
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove Personal Protective Equipment immediately after handling this product.
- Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

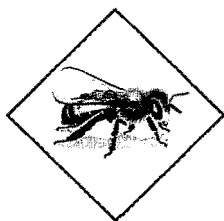
This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

PROTECTION OF POLLINATORS



APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications.
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: <http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency.

For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed and commercially grown ornamentals that are attractive to pollinators:



FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met:

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

FOR FOOD/FEED CROPS AND COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55 °F



- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR part 170.

This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is:

- Coveralls,
- Chemical-resistant gloves made of nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, barrier laminate ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils or viton ≥ 14 mils, and
- Shoes plus socks.

TAKE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

Spray Drift Management

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

Mixing and Loading

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading areas and potential surface to groundwater conduits such as field sumps, uncased well head, sinkholes or field drains.

For Aerial Applications

Mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices. Use the minimum practical boom length, do not exceed 75% of the wing span or rotor diameter.

Release spray at the lowest possible height consistent with good pest control and flight safety. Do not make applications more than 10 feet above the crop canopy.

Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150 to 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, make applications to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.

Wind Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

No-Spray Zone Requirements for Soil and Foliar Applications

Do not apply by ground within 25 feet, or by air within 150 feet of lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries and commercial fish farm ponds.

Airblast (Air Assist) Specific Applications for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vineyards via a radially, or laterally directed air stream. The following specific drift management practices should be followed:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows).
- Only spray inward, toward the orchard or vineyard, for application to the outside rows.

Runoff Management

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip.

When used on erodible soils, use best management practices for minimizing runoff. Consult your local Natural Resources Conservation Service for recommendations in your use area.

Endangered Species Notice

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent or Pesticide State Lead Agency for information concerning endangered species in your area.

Resistance Management

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

Tacoma Ag Imidacloprid 4.0 contains a Group 4A insecticide called imidacloprid. Insect biotypes with acquired or inherent tolerance to Group 4A products may eventually dominate the insect population if Group 4A products are used repeatedly as the pre-dominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by Tacoma Ag Imidacloprid 4.0 and to other Group 4A products.

The active ingredient in Tacoma Ag Imidacloprid 4.0 is a member of neonicotinoid chemical group. Insect pests resistant to other chemical classes have not shown cross-resistant to this product. In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, for each crop season: 1) make only a single soil application of Tacoma Ag Imidacloprid 4.0; 2) foliar applications of products from the same class may not be made following a long residual soil application of Tacoma Ag Imidacloprid 4.0 or other neonicotinoid products.

If a soil application of Tacoma Ag Imidacloprid 4.0 has not been made during a crop season and foliar applications are to be made, avoid using a block of more than three consecutive applications of Tacoma Ag Imidacloprid 4.0 and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Tacoma Ag, LLC strongly encourages the rotation to a block of applications with effective products from a different mode of action before using additional applications of neonicotinoid products. Using a block of rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Do not make foliar applications of Tacoma Ag Imidacloprid 4.0 or other Group 4A products on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

Other Group 4A neonicotinoid products used as foliar treatments include: Actara®, Assail®, Calypso®, Centric®, Intruder®, Leverage® and Provado®. Other 4A Group neonicotinoid products used as soil treatment include: Admire® and Platinum®.

Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org/>.

APPLICATION DIRECTIONS

For soil applications of Tacoma Ag Imidacloprid 4.0, direct product into the seed or root zone of crop. Failure to place Tacoma Ag Imidacloprid 4.0 into root zone may result in loss of control or delay in onset of activity. Tacoma Ag Imidacloprid 4.0 may be applied with ground or chemigation application equipment. Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient imidacloprid per acre per year, including seed treatment, soil, and foliar uses, unless specified within a crop-specific application section for a given crop.

Do not apply this product in enclosed structures such as planthouses or greenhouses.

Apply foliar applications of Tacoma Ag Imidacloprid 4.0 as directed or a broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment, and spray adjuvant if necessary to obtain thorough coverage. Failure to provide adequate coverage and retention of Tacoma Ag Imidacloprid 4.0 on leaves and fruit may result in loss of insect control or delay in onset of activity. Apply Tacoma Ag Imidacloprid 4.0 with properly calibrated ground or aerial application equipment. Minimum spray volumes, unless otherwise specified on crop-specific application sections, are 10.0 gallons per acre by ground and 5.0 gallons per acre by air. This product may also be applied by overhead chemigation (see additional information in **CHEMIGATION** section of this label below), if allowed in crop-specific application section.

When applied as a soil application, optimum activity of Tacoma Ag Imidacloprid 4.0 results from applications to the root zone of plants to be protected. The earlier this product is available to the developing plant, the earlier the protection begins. Tacoma Ag Imidacloprid 4.0 is continuously taken into the roots over a long period of time, and the systemic nature of Tacoma Ag Imidacloprid 4.0 allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in extended residual activity of Tacoma Ag Imidacloprid 4.0, the control of insects, and the prevention and/or reduction of virus transmission or symptom expression, and plant health benefits. The rate of Tacoma Ag Imidacloprid 4.0 applied affects the length of the plant protection period. Use higher listed rates when infestations occur later in crop development or where pest pressure is continuous. Tacoma Ag Imidacloprid 4.0 will generally not control insects infesting flowers, blooms, or fruit. Additional crop protection may be required for insects feeding in or on these plant parts, and for insects not listed in crop-specific, pest-controlled sections of this label. Additionally, specific Tacoma Ag Imidacloprid 4.0 application instructions are also provided in the crop-specific sections of this label.

Suppression, or less than complete control of certain insect pests that may carry diseases including reduced feeding, may also result from a Tacoma Ag Imidacloprid 4.0 application. Complete control of these pests may require supplemental control measures.

Generally, this product is not used on crops grown for production of true seed intended for private or commercial planting but may be allowed under state-specific, 24(c) labeling. Additional information on Tacoma Ag Imidacloprid 4.0 uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCA's, consultants, or local Tacoma Ag, LLC representatives.

Apply only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in nonsoil such as perlite, vermiculite, rock wool, or other soilless media, or plants growing hydroponically.

Pre-mix Tacoma Ag Imidacloprid 4.0 with water or other appropriate diluent prior to application. Keep Tacoma Ag Imidacloprid 4.0 and water suspension agitated to avoid settling.

Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient imidacloprid per acre per year, including seed treatment, soil, and foliar uses, unless specified within a crop-specific application section for a given crop.

MIXING INSTRUCTIONS

Minimum spray volumes are 10.0 gallons per acre by ground application and 5.0 gallons per acre through aerial equipment. To prepare the application mixture, add half of the required amount of water to the spray tank and with agitation add Tacoma Ag Imidacloprid 4.0. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. Tacoma Ag Imidacloprid 4.0 may also be used with other pesticides and/or fertilizer solutions. Please see Compatibility Note below. When tank mixtures of this product and other pesticides are involved, prepare the tank mixture as instructed above and follow Mixing Order below.

Mixing Order

When pesticide mixtures are needed, add wettable powders first, Tacoma Ag Imidacloprid 4.0 or other flowables second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer-pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

Compatibility Note

Test compatibility of the intended tank mixture before adding this product to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order, to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Do not use if poor mixing or formation of precipitates that do not readily re-disperse. This indicates an incompatible mixture. For further information, contact your local Tacoma Ag, LLC representative.

Tank Mixing

When tank-mixing with other products, it is the responsibility of the end-user/applicator to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another)

Chemigation

Types of Irrigation Systems: Foliar chemigation applications of this product may be made to crops through overhead sprinkler systems if specified in crop-specific application sections. Soil chemigation application of Tacoma Ag Imidacloprid 4.0 may only be made to crops through chemigation as specified in crop-specified application sections and only through low-pressure systems specifically for a given crop. Do not apply this product through any other type of irrigation system. Make foliar chemigation applications of this product as concentrated as possible. Retention of Tacoma Ag Imidacloprid 4.0 on target site of insect infestation is necessary for optimum activity. Do not use chemigation of Tacoma Ag Imidacloprid 4.0 in water volumes exceeding 0.10 inch per acre. See crop-specific application sections of the label for more information.

Uniform Water Distribution and System Calibration: The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have any questions about calibration, contact Cooperative Extension Service specialists, equipment manufacturers, or other experts.

Chemigation Monitoring: A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Drift: Do not apply when wind speed favors drift beyond the area intended for treatment.

Required System Safety Devices: The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems: Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, back flow preventer (RPZ), or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

ROTATIONAL CROPS*

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exist for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

IMMEDIATE PLANT-BACK:

All crops on this label plus the following crops not on this label: Barley, Canola, Corn (field, sweet and pop), Mustard seed, Rapeseed, Sorghum, Sunflower, Watercress, Wheat and all crops from the following Crop Groups as recognized and defined by EPA.

ROOT VEGETABLES – Crops of Crop Group 1

BULB VEGETABLES - Crops of Crop Group 3-07

LEAFY GREEN VEGETABLES – Crops of Crop Group 4

HEAD and STEM BRASSICA VEGETABLES - Crops of Crop Group 5

LEGUME VEGETABLES - Crops of Crop Group 6 including: Edible Podded plus Dried plus Succulent Shelled, Peas and Beans

FRUITING VEGETABLES - Crops of Crop Group 8

CUCURBIT VEGETABLES - Crops of Crop Group 9

CITRUS - Crops of Crop Group 10

POME FRUIT - Crops of Crop Group 11

STONE FRUIT - Crops of Crop Group 12

BUSHBERRY and CANEBERRY - Crops of Crop Group 13-07

HERBS - Crops of Crop Group 19A

TROPICAL FRUIT – Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Llama, Jaboticaba, Guava, Longan, Lychee, Mamey sapote, Mango, Papaya, Passion fruit, Persimmon, Pulasan, Rambuten, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

30-DAY PLANT-BACK:

Cereals (including buckwheat, millet, oats, rice, rye, and triticale), soybeans and safflower

10-MONTH PLANT-BACK:

Onion and bulb vegetables

12-MONTH PLANT-BACK:

All Other Crops

*Cover crops for soil building or erosion control may be planted any time; but do not graze or harvest for food or feed.

APPLICATION INFORMATION

Apply this product with properly calibrated ground or aerial application equipment. Apply specified rate per acre as a directed or broadcast spray to infested area at earliest threshold for target pest, as population begins to develop. Thorough uniform coverage of all plant parts is required to achieve optimum control. Scout fields and retreat if needed.

The lower rates can be used early season when pest pressures are low or when tank-mixing with other effective products registered for target insect control. Degree of control or suppression of additional labeled pests will be determined, in part, by the stage of pest development at application and infestation level of those pests. Tacoma Ag Imidacloprid 4.0 provides optimal performance against early instar and early nymphal stages of insects as well as bollworm/budworm eggs. Applications made with less than 5.0 gallons per acre may result in slower activity and/or less overall control from a single application than an application made with higher gallonages. Use an organosilicone-based spray adjuvant for applications targeting aphids and whiteflies.

GLOBE ARTICHOKE* - soil treatment

Pests Controlled

	Rate Fl Oz/A.
Aphids	8.0 to 16.0
Leafhoppers	

Restrictions:

Pre-Harvest Interval (PHI): 7 days

Maximum Tacoma Ag Imidacloprid 4.0 amount allowed per year: 16.0 fluid ounces per acre (0.50 pound active ingredient per acre)

Applications

Apply specified dosage in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. In-furrow spray at planting directed on or below seed.

*Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

GLOBE ARTICHOKE – foliar treatment

Pests Controlled	Rate Fl Oz/A
Aphids	1.6 to 4.0
Leafhoppers	

Restrictions:

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16 .0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700® to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

HERBS - soil treatment

Including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Camomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood.

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 12.0
Flea beetles	
Leafhoppers	
Whiteflies	
Pests/Diseases Suppressed	
Thrips (foliage-feeding thrips only)	8.0 to 12.0

Restrictions:

Pre-Harvest Interval (PHI): **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. In-furrow spray or transplant-water drench during setting or transplanting;
3. Shankd-into or below eventual seed-line;
4. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Tacoma Ag, LLC strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

HERBS – foliar treatment

Including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

Pests Controlled	Rate FI Oz/A
Aphids	1.4
Flea beetles	
Leafhopper	
Whiteflies	

Restrictions:

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per season: **4.2 fluid ounces per acre** (0.13 pound active ingredient per acre)

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Apply this product through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for optimal control. The addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's specified use rate may improve coverage and control.

Note: Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, treat only a small area or small number of plants of each listed above and evaluate prior to commercial use.

FIELD CROPS
Application Instructions

COTTON - Soil Treatment

Pests Controlled	Rate FI Oz/1000 Row-Ft	Rate FI Oz/A
Cotton aphid	0.65	8.5 to 10.5
Plant bugs		(Depending on row-spacing)
Thrips		
Whiteflies		

Restrictions

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **10.5 fluid ounces per acre** (0.33 pound active ingredient per acre)

Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient of this product, Provado®, Trimax® or Leverage per acre per year, including seed treatment as Gaucho®, soil and foliar uses. Do not apply more than a total of 6 applications of the active ingredient per year. Do not graze treated fields after any application of this product. Please see Resistance Management section of this label.

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
3. Chemigation into root-zone through low-pressure drip or trickle irrigation.

COTTON - Foliar Treatment

Pests Controlled	Rate FI Oz/A
Bandedwinged whitefly	1.0 to 2.0
Bollworm/Budworm (ovicidal effect)	
Cotton aphid	
Cotton fleahopper	
Green stink bug	
Plant bugs (excludes <i>Lygus hesperus</i>)	
Southern green stink bug	
Pests Suppressed	
Lygus bug (<i>Lygus hesperus</i>)	1.5 to 2.0
Whiteflies (other than bandedwinged whitefly)	

Restrictions

Pre-Harvest (PHI): **14 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **10.0 fluid ounces per acre** (0.31 pound active ingredient per acre)

Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient per acre per year, including seed treatment, soil and foliar uses.

Apply this product through properly calibrated ground, aerial, or chemical application equipment.

Maximum number of Tacoma Ag Imidacloprid 4.0 applications per year: **5**

Do not graze treated fields after any application of this product.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

TANK MIX INFORMATION

Pests Controlled (In addition to pests listed above)	Tacoma Ag Imidacloprid 4.0 Rate FI Oz/A	Bidrin® 8* Rate FI Oz/A
For early season control of: Thrips	1.0 to 1.5	1.6 to 3.2
For mid to late season control of: Cotton leaf perforator Grasshoppers Plant bugs Saltmarsh caterpillar Stink bugs (including Brown stink bug)	1.0 to 1.5	4.0 to 8.0

Restrictions (in addition to Restrictions listed above)

*Refer to the Bidrin 8 product label; follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.

PEANUT*- soil treatment

Pests Controlled	Rate FI Oz/A
Aphids Leafhoppers Whiteflies	8.0 to 12.0
Pest Suppressed	
Thrips	8.0 to 12.0

Restrictions:

Pre-Harvest Interval (PHI): **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Applications:

Apply specified dosage in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Notes

Increases in Tomato spotted wilt virus (TSWV) incidence have been observed with applications of Tacoma Ag Imidacloprid 4.0 on multiple varieties of peanut. This may also be the case with other tospoviruses, or other viruses transmitted by various thrips species or perhaps, other pests. Prior to applying this product to Peanuts, Tacoma Ag, LLC recommends consultation with the State, Cooperative Extension Service, or Tacoma Ag, LLC representative, for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or other tospovirus are endemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia, Tomato spotted wilt virus index, before applying this product.

*Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

POTATO - soil treatment

Pests Controlled	Rate FI Oz/1000 Row-Ft	Rate FI Oz/A
Aphids	0.45 to 0.65	6.5 to 10.0
Colorado potato beetle		
Flea Beetles		
Leafhoppers		
Potato psyllid		
Pests/Diseases Suppressed		
Symptoms of:		
Net necrosis (PLRV)	0.45 to 0.65	6.5 to 10.0
Potato leaf roll virus (PLRV)		
Potato yellows		
Wireworms (with in-furrow spray at-planting)		

Restrictions

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **10.0 fluid ounces per acre** (0.31 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. In-furrow spray during planting directed on seed pieces or seed potatoes;
2. Subsurface side-dress on both sides of the row covered with 3 or more inches of soil;
3. Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil;
4. Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective pest control or suppression, Tacoma Ag Imidacloprid 4.0 applications must be placed below soil-surface and in contact with seed piece or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of this product may be made in a 2 to 4 inch band (width of planter shoe opening) and completely covered.

POTATO**(Seed Piece Treatment)**

Pests Controlled	Rate FI Oz/100 Lb Seed	Rate FI Oz/A**
Aphids	0.2 to 0.4	4.0 to 8.0
Colorado potato beetle		
Flea beetles		
Leafhoppers		
Potato Psyllid		
Wireworms (seed-piece protection)		
Pests/Diseases Suppressed		
Symptoms of:		
Net necrosis (PLRV)	0.4	8.0
Potato leaf roll virus (PLRV)		
Potato yellows		

Restrictions

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **10.0 fluid ounces per acre** (0.31 pound active ingredient per acre)

Do not use treated seed-pieces for food, feed, or fodder. Do not apply any subsequent application of Tacoma Ag Imidacloprid 4.0 (in-furrow), Gaucho, Leverage or Provado following a Tacoma Ag Imidacloprid 4.0 seed-piece treatment.

Instructions

Apply specified dosage as a diluted spray onto seed-pieces using a shielded spray system. Dilute with 3 parts water, or less, to 1 part Tacoma Ag Imidacloprid 4.0. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after Tacoma Ag Imidacloprid 4.0 application. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Plant seed-pieces as soon as possible after treating avoiding prolonged exposure of Tacoma Ag Imidacloprid 4.0 treated seed-pieces to sunlight and in accordance with the directions of your local Extension specialist.

Consult your local Tacoma AG, LLC representative or crop protection product dealer for information relevant to your area.

****Based on a seeding rate of 2000 pounds per acre.**

POTATO - foliar treatment

Pests Controlled	Rate FI Oz/A
Aphids	1.52
Colorado potato beetle	
Flea beetles	
Leafhoppers	
Psyllids	

Restrictions:Pre-Harvest Interval (PHI): **7 days**Minimum interval between applications: **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **6.4 fluid ounces per acre** (0.2 pound active ingredient per acre)**Applications**

Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

TOBACCO - soil treatment

Pests Controlled	Rate FI Oz/1000 Plants (as seedling tray drench)	Rate FI Oz/1000 Plants (in-furrow or transplant-water)
Aphids	0.5	0.7
Flea beetles		
Mole crickets	0.7 to 1.4	0.9 to 1.4
Whiteflies		
Wireworms		

Pests/Diseases Suppressed

Cutworms	0.7 to 1.4	0.9 to 1.4
Symptoms of: Tomato spotted wilt virus (TSWV)		

RestrictionsPre-Harvest Interval (PHI): **14 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)**Instructions**

Apply specified dosage of this product in one of the following methods:

1. Uniform, broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting followed immediately by overhead irrigation to wash Tacoma Ag Imidacloprid 4.0 from foliage into potting media. Failure to wash this product from foliage may result in reduction in pest control. Transplants must be handled carefully during setting to avoid dislodging treated potted media from roots.
2. In-furrow spray or transplant-water drench during setting.
3. Chemigation into root-zone through low-pressure drip, trickle, micro sprinkler or equivalent equipment.

Important Note: Proper tray drench applications of this product have been shown to be the most efficacious method of application. However, the specified rate of Tacoma Ag Imidacloprid 4.0 may be applied as a combination of the tray drench in the planthouse and/or transplant-water drench in field. Adverse growing conditions may cause a delay in uptake of this product into the plant and a delay in control.

TOBACCO – foliar treatment

Pests Controlled	Rate FI Oz/A
Aphids	0.8 to 1.6
Flea beetles	1.6
Japanese beetles	

RestrictionsPre-Harvest Interval (PHI): **14 days**Minimum interval between applications: **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **8.9 fluid ounces per acre** (0.28 pound active ingredient per acre)

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

VEGETABLE and SMALL FRUIT CROPS

Application Directions

Restrictions

Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

BRASSICA (COLE) LEAFY VEGETABLES - soil treatment

Including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (*gai lan*) broccoli, Chinese (*bok choy*) cabbage, Chinese (*napa*) cabbage, Chinese mustard (*gai choy*) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip tops (leaves)

AND

LEAFY VEGETABLES - soil treatment

Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Raddicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian Spinach)), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled

Rate
Fl Oz/A
(on 36 inch rows)

Aphids
Leafhoppers
Thrips (foliage feeding thrips only)
Whiteflies

5.0 to 12.0

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.
7. Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

BRASSICA (COLE) LEAFY VEGETABLES¹ – foliar treatment

Including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (*gai lan*) broccoli, Chinese (*bok choy*), cabbage, Chinese (*napa*) cabbage, Chinese mustard (*gai choy*) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip tops (leaves)

Pests Controlled

Rate
Fl Oz/A

Aphids
Flea beetles
Leafhoppers
Whiteflies

1.5

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **7.68 fluid ounces per acre** (0.24 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

LEAFY VEGETABLES¹ – foliar treatment

Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum, (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	Rate Fl Oz/A
Aphids	1.5
Flea beetles	
Leafhoppers	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **7.6 fluid ounces per acre** (0.24 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

For applications made to watercress, production fields must be drained of water at least 24 hours prior to application, and water must not be reapplied to the field for a minimum of 24 hours following the applications. Applications must be made to fully leafed-up canopies only.

LEAFY PETIOLE VEGETABLES - soil treatment

Including: Cardoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only), Florence fennel (including sweet anise, sweet fennel, Finocchio), Rhubarb, Swiss chard

Pests Controlled	Rate Fl Oz/A
Aphids	5.0 to 12.0
Leafhoppers	
Thrips (foliage feeding thrips only)	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **45 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root zone.
7. Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

BULB VEGETABLES (*Allium* sp.)¹ - soil treatment

Including: Chinese chive (fresh leaves), Chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic (com- mon group, great-headed group, serpent group), Kurrat group, Leek group (including common, lady's and wild), Lily (bulb), Onion (bulb and green leaves including: common group, Beltsville bunching, Chinese bulb, fresh, green, macrostem, Pearl group, potato onion group, tree onion-tops, Welsh-tops), Shallot, plus cultivars, varieties, and/or hybrids of these.

Pests Controlled	Rate FI Oz/A
Thrips (foliage feeding thrips only)	16.0

Restrictions:

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Applications made to higher organic matter soils may result in reduced or shortened activity on pest.

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Instructions

Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
4. Post-seeding drench, transplant-water drench, or hill drench.

CUCURBIT VEGETABLES - soil treatment

Including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon, and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

Field application instructions. See details below for additional planthouse instructions.

Pests Controlled	Rate FI Oz/A
Aphids	8.0 to 12.0
Cucumber beetles	
Leafhoppers	
Thrips (foliage-feeding thrips only)	
Whiteflies	

Pests/Diseases Suppressed

Bacterial wilt (as vectored by various cucumber beetles)	8.0 to 12.0
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Leaf silvering resulting from whitefly feeding	
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Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

Planthouse Application Instructions*

Pests Controlled	Rate FI Oz/1000 Plants
Aphids	0.05
Whiteflies	

Restrictions

Maximum amount of Tacoma Ag Imidacloprid 4.0 applied in the planthouse: **0.05 fluid ounce** (0.00156 pound active ingredient) per **1000 plants**.

Maximum number Tacoma Ag Imidacloprid 4.0 applications in planthouse: **1**

Instructions:

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:

1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash this product from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash this product from foliage may result in reduced pest control;
2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher listed rates or increased number of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.

Not all varieties of cucurbit vegetables have been tested for tolerance to Tacoma Ag Imidacloprid 4.0 applied to seedling flats. Therefore, treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

*Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

FRUITING VEGETABLES¹ - soil treatment

Including: Eggplant, Ground cherry, Okra, Pepinos, Pepper (including bell, chili, cooking, pimento and sweet) Tomato, and Tomatillo

Field application instructions. See details below for additional planthouse instructions.

Pests Controlled

	Rate Fl Oz/A
Aphids	Okra and Pepper
Colorado potato beetle	8.0 to 16.0
Flea beetles	
Leafhoppers	
Thrips (foliage-feeding thrips, only)	Other Crops
Whiteflies	8.0 to 12.0

Pests/Diseases Suppressed

Symptoms of:	Okra and Pepper
Tomato mottle virus	8.0 to 16.0
Tomato spotted wilt virus	Other Crops
Tomato yellow leaf curl virus	8.0 to 12.0

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed on pepper and okra crops per crop season: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Maximum Tacoma Ag Imidacloprid 4.0 allowed on other fruiting crops per crop season: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

Planthouse Application Instructions²**Pests Controlled**

	Rate Fl Oz/1000 Plants
Aphids	0.05
Whiteflies	

Restrictions

Maximum amount of Tacoma Ag Imidacloprid 4.0 applied in the planthouse: **0.05 fluid ounce** (0.00156 pound active ingredient) per **1000 plants**.

Maximum number Tacoma Ag Imidacloprid 4.0 applications in planthouse: **1**

Instructions

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:

1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash this product from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash this product from foliage may result in reduced pest control;
2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection.

Applications of higher listed rates or increased number of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid dislodging treated potted media from roots.

Not all varieties of fruiting vegetables have been tested for tolerance to Tacoma Ag Imidacloprid 4.0 applied to seedling flats. Therefore treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

²Use not permitted in CA unless otherwise directed by state-specific 24(c) labeling.

FRUITING VEGETABLES¹ – foliar treatment

Including: Eggplant, Ground cherry, Okra, Pepinos, Pepper (including bell, chili, cooking, pimento, and sweet), Tomato, and Tomatillo

Pests Controlled	Rate Fl Oz/A
Aphids	1.5 to 2.4
Colorado potato beetle	
Leafhoppers	
Whiteflies	
Pepper weevil	2.4

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **7.6 fluid ounces per acre** (0.24 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

For pepper weevil, apply specific dosage of Tacoma Ag Imidacloprid 4.0 by ground equipment only, timing applications prior to a damaging population becoming established. Good coverage of foliage and fruit is necessary for optimum control. Applications of this product must be incorporated into a full-season program where alternations of effective products from multiple classes of chemistry and different modes of action are utilized in a blocked or windowed approach.

For additional information, please contact your Tacoma Ag, LLC representative, Extension Specialist, or crop advisor.

When targeting adult whiteflies, use higher listed rates.

LEGUME VEGETABLES except soybean, dry - soil treatment

Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean

Bean (*Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)

Bean (*Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)

Other Beans and Peas (Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean)

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 12.0
Leafhoppers	
Thrips (foliage feeding thrips, only)	
Whiteflies	
Pests/Diseases Suppressed	
Symptoms of:	8.0 to 12.0
Bean common mosaic virus (BCMV)	
Bean golden mosaic virus (BGMV)	
Beet curly top hybrigeminivirus (BCTV)	

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. In-furrow spray at planting directed on or below seed;
3. In a narrow (2" or less) surface band over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours following application;
4. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
5. As a post-seeding drench, transplant drench, or hill drench.
6. Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

LEGUME VEGETABLES¹ except soybean, dry - foliar treatment

Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean

Bean (*Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)

Bean (*Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)

Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

Pests Controlled	Rate Fl Oz/A
Aphids	1.4
Leafhoppers	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **4.2 fluid ounces per acre** (0.13 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required

to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

ROOT VEGETABLES* - soil treatment

Including: Beet (garden)¹, Burdock (edible)¹, Carrot¹, Celeriac¹, Chervil (turnip-rooted)¹, Chicory¹, Ginseng, Horseradish, Kava^{1,2}, Parsley (turnip-rooted), Parsnip¹, Radish¹, Oriental radish (daikon)¹, Rutabaga¹, Salsify (oyster plant), Salsify (black)¹, Salsify (Spanish), Skirret and Turnip¹

Pests Controlled	Rate Row-Ft	FI Oz/1000 Rate FI Oz/A
Aphids	0.35 to 0.8	5.0 to 12.0
Flea beetles		
Leafhoppers		
Thrips (foliage-feeding thrips only)		
Whiteflies		

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Maximum Tacoma Ag Imidacloprid 4.0 applications per crop season: **1**

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray (rate specified per 1000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting;
3. In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting.

Important Note: The rate applied affects the length of control. Use higher listed rates where infestations occur later in crop development, or where pest pressure is continuous. Tacoma Ag Imidacloprid 4.0 rates less than 0.7 fluid ounce per 1000 row-feet will not provide adequate residual pest control. Tacoma Ag Imidacloprid 4.0 treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

¹Tops or greens from these crops may be utilized for food or feed.

²Use not permitted in California unless otherwise directed by state-specific 24(c) labeling

^{*}Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

ROOT VEGETABLES¹ – foliar treatment

Including: Beet (garden)², Burdock (edible)², Carrot², Celeriac², Chervil (turnip-rooted)², Chicory², Ginseng, Horseradish, Kava^{2,3}, Parsley (turnip-rooted), Parsnip², Radish², Oriental radish (daikon)², Rutabaga², Salsify (oyster plant), Salsify (black)², Salsify (Spanish), Skirret, Turnip²

Pests Controlled	Rate FI Oz/A
Aphids	1.4
Flea beetles	
Leafhoppers	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **1.4 fluid ounces per acre** (0.044 pound active ingredient per acre) on Radish, **4.2 fluid ounces per acre** (0.13 pound active ingredient per acre) on other crops.

Maximum Tacoma Ag Imidacloprid 4.0 application(s) per crop season: **1 on radish, 3 on all other crops.**

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

²Tops and greens from these crops may be utilized for food or feed.

³Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

SOYBEAN* - foliar treatment**Pests Controlled**

	Rate Fl Oz/A
Aphids	1.5
Bean leaf beetle	
Cucumber beetles/Rootworm adults	
Japanese beetle (adults)	
Leafhoppers	
Whiteflies	

Restrictions:Pre-Harvest Interval (PHI): **21 days**Minimum interval between applications: **7 days**Maximum Tacoma Ag Imidacloprid 4.0 amount allowed per year: **4.5 fluid ounces per acre** (0.14 pound active ingredient per acre)

*Use not permitted in California or New York unless otherwise directed by state-specific 24(c) labeling.

STRAWBERRY¹ - soil treatment**Annual and Perennial Crops****Pests Controlled**

	Rate Fl Oz/A
Aphids	12.0 to 16.0
Whiteflies	

RestrictionsPre-Harvest Interval (PHI): **14 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)**Instructions**

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment after plants are established or on perennial crops in early spring prior to bud opening;
2. As a plant material or plant hole treatment just prior to, or during transplanting.
3. As a band spray over-the-row in a minimum of 20.0 gallons of water per acre, followed immediately by overhead irrigation to incorporate product into root zone. Do not use plastic or other mulches that limit movement of this product into root zone.

The rate applied affects the length of control. Use higher listed rates where infestations may occur later in crop development or where pest exposure is continuous.

Post-harvest Use on Perennial Crops**Pests Controlled**

	Rate Fl Oz/A
White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle, Oriental beetle)	8.0 to 12.0

RestrictionsPre-Harvest Interval (PHI): **14 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre).**Instructions**Apply a single application **post-harvest to coincide with renovation of strawberry fields** and during active egg-laying period of beetles. Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. As a ground spray via boom or backpack sprayer in a minimum of 20.0 gallons of water per acre;
2. As a row-band spray using an adjusted amount of product based on the treated row band area in proportion to the amount required per full acre. The bandwidth should be equivalent to the width of the anticipated fruiting bed;
3. As a chemigation application with 600 to 1000 gallons of water followed by 0.10 to 0.25 inches irrigation.

Important: All soil-surface applications must be followed by 0.25 inches of rainfall or overhead irrigation water per acre within 2 hours of application. Failure to adequately incorporate this product into egg-deposition zone may result in decreased activity of beetle grubs.¹Do not use both application methods on the same crop in the same season.

STRAWBERRY – foliar treatment

Pests Controlled	Rate FI Oz/A
Aphids	1.5
Spittlebugs	
Whiteflies	

RestrictionsPre-Harvest Interval (PHI): **7 days**Minimum interval between applications: **5 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **4.5 fluid ounces per acre** (0.14 pound active ingredient per acre)

Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

SUGAR BEET* - soil treatment

(for use only in CA)

Pests Controlled	Rate FI Oz/A
Aphids	3.0 to 6.0
Flea beetles	
Leafhoppers	
Whiteflies	

Pests/Diseases Suppressed

Symptoms of:

Western yellows/Beet curly top hybrigeminivirus (BCTV) 3.0 to 6.0

RestrictionsMaximum Tacoma Ag Imidacloprid 4.0 allowed per year: **6.0 fluid ounces per acre** (0.18 pound active ingredient per acre)Maximum imidacloprid allowed per year: **0.18 pound active ingredient per acre** (from any formulation) on any row spacing. Do not apply immediately prior to bud opening or during bloom or when bees are foraging.**Instructions**

Apply specified dosage of this product in the following method:

1. Apply specified dosage in sufficient carrier volume to insure uniform application. Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting.

The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.

*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Tacoma Ag Imidacloprid 4.0 Conversion Chart for Linear Application

RATE:	Rate: FI Oz/1000 row-ft							
	Based on average row spacing (in inches)							
FI Oz/A	10	15	20	25	30	35	40	45
5	0.10	0.14	0.19	0.24	0.29	0.33	0.38	0.43
6	0.11	0.17	0.23	0.29	0.34	0.40	0.46	0.51
7	0.13	0.20	0.27	0.33	0.40	0.47	0.53	0.60
8	0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.68
9	0.17	0.26	0.34	0.43	0.51	0.60	0.68	0.77
10	0.19	0.29	0.38	0.48	0.57	0.67	0.76	0.86
12	0.23	0.34	0.46	0.57	0.69	0.80	0.92	1.03
14	0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21
16	0.31	0.46	0.61	0.77	0.92	1.07	1.22	1.38

TREE, BUSH and VINE CROPS

Application Directions

BANANA and PLANTAIN - soil treatment

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 16.0
Leafhoppers	
Pests/Diseases Suppressed	
Scales	8.0 to 16.0
Restrictions	
Pre-Harvest Interval (PHI): 0 day	
Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: 16.0 fluid ounces per acre (0.50 pound active ingredient per acre)	

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

BANANA and PLANTAIN – foliar treatment

Pests Controlled	Rate Fl Oz/A
Aphids	3.2
Leafhoppers	
Thrips	
Restrictions	
Pre-Harvest Interval (PHI): 0 day	
Minimum interval between applications: 14 days	
Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: 16.0 fluid ounces per acre (0.5 pound active ingredient per acre)	

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

Apply specified dosage as a broadcast or directed spray to infested area ensuring thorough coverage. This product may be applied through properly calibrated ground or aerial application equipment. Aerial applications of this product may result in slower activity and reduced control relative to results from ground application.

BUSHBERRY - soil treatment**Including:** Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Ligonberry, Salal**Pests Controlled**

	Rate Fl Oz/A
Japanese beetle (adults, feeding on foliage)	8.0 to 16.0
White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	

RestrictionsPre-Harvest Interval (PHI): **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)**Instructions**

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. 18-inch band on each side of the row followed with 0.25 inches of irrigation immediately after application.

For optimal grub control, apply Tacoma Ag Imidacloprid 4.0 to control 1st or 2nd instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st. For optimum control of Japanese beetle larvae, make applications from June 1 to July 15. Do not apply pre-bloom or during bloom or when bees are foraging.

Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root-zone will help protect berry plant roots from grub feeding.

Apply this product to moist soil. If necessary, apply one hour of irrigation water immediately before application of Tacoma Ag Imidacloprid 4.0. To facilitate movement of this product into the soil and root-zone, 1/2 to 1 inch of irrigation water or rainfall must be applied or received within 24 hours of application.

BUSHBERRY – foliar treatment**Including:** Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, and Salal**Pests Controlled**

	Rate Fl Oz/A
Aphids	1.2 to 1.6
Leafhoppers / Sharpshooters	
Blueberry maggot	2.4 to 3.2
Japanese beetle (adults), Thrips (foliage-feeding thrips only)	

RestrictionsPre-Harvest Interval (PHI): **3 days**Minimum interval between applications: **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Do not make more than 5 foliar applications of Tacoma Ag Imidacloprid 4.0 per year.

Minimum application volume (water): 20.0 GPA – ground, 5.0 GPA – aerial.

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

CANEBERRY - soil treatment

Including: Blackberry (*Rubus eubatus*, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these), Raspberry (black and red, *Rubus occidentalis*, *Rubus strigosus*, *Rubus idaeus*)

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 16.0
Leafhoppers	
Whiteflies	
Rednecked cane borer	12.0 to 16.0
Pest Suppressed	
Thrips (foliage feeding thrips only)	8.0 to 16.0

Restrictions:

Pre-Harvest Interval (PHI): **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications:

Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. Basal, soil drench in a minimum of 500 gallons solution per acre.

CITRUS (Containerized) – Soil Treatment

Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor). Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

Pests Controlled	Rate mL/ft³ Container Media
Aphids	0.375
Asian citrus psyllid	
Black fly	
Citrus leafminer	
Leafhoppers / Sharpshooters	
Mealybugs	
Scales	
Whiteflies	
Citrus root weevil (larval complex)	0.625 to 1.25
Pests/Diseases Suppressed	
Citrus thrips (foliage feeding thrips only)	1.25

Instructions

Determine volume of container and calculate dosage necessary to treat container. Apply calculated dosage of this product per container as a soil drench or through low-pressure drip or trickle irrigation water. Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results, treatment should be made at planting prior to insect infestation. Retreat if necessary. For control of larvae of the citrus root weevil complex, application should be made prior to neonate larvae entering potting media. Utilize higher listed dosage for heavy infestations.

CITRUS (Field) - soil treatment

Including: Calamondin, Citrus, Citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 16.0
Asian citrus psyllid	
Black fly	
Citrus leafminer	
Leafhoppers / Sharpshooters	
Mealybugs	
Scales	
Termites (FL only)	
Whiteflies	

Pests/Diseases Suppressed

Citrus nematode	16.0
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Symptoms of:

Citrus tristeza virus CTV through vector control

Citrus yellows

Thrips (foliage feeding thrips only)

Restrictions

Pre-Harvest Interval (PHI): 0 day

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. To break soil surface tension, lightly pre-wet soil prior to applications of Tacoma Ag Imidacloprid 4.0. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move this product into root-zone. Allow 24 hours before initiating subsequent irrigations;
2. Soil surface band spray on both sides of the tree. Overlap bands at the base of the tree to create a continuous band within the drip-line area of the tree, to be followed immediately with light sprinkler irrigation sufficient to move the product into the upper portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less;
3. Drench to base of tree not exceeding 1.0 quart total solution/tree immediately around trunk of tree and extending outward covering the entire fibrous root system of the tree. Only suitable for trees up to 8 feet tall;
4. For control of existing termite infestations, apply specified dosage in 1.0 to 4.0 quarts of total solution volume, depending on size of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk.
5. For suppression of citrus nematode, apply specified dosage through low-pressure chemigation or soil surface band spray only, ensuring complete coverage of the root system and utilizing application directions stated above for the respective application method. Repeated and regular use of this product over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

CITRUS (Field) – foliar treatment

Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, Tangelo, and other cultivars and/or hybrids of these.

Pests Controlled	Rate Fl Oz/A
Aphids	4.0 to 8.0
Asian citrus psyllid	(depending on tree size, target pest,
Blackfly	and infestation pressure)
Leafhoppers / Sharpshooters	
Leafminers	
Mealybugs	
Scales	
Whiteflies	

Pests Suppressed

Rate
Fl Oz/A

Thrips (foliage-feeding thrips only)

4.0 to 8.0

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

Application

Scales – time applications to the crawler stage. Treat each generation.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

COFFEE - soil treatment**Pests Controlled**

Rate
Fl Oz/A

Aphids

8.0 to 16.0

Leafhoppers

Leafminer

Pests/Diseases Suppressed

Scales

8.0 to 16.0

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
3. Basal, soil drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

COFFEE – foliar treatment**Pests Controlled**

Rate
Fl Oz/A

Aphids

3.2

Leafhoppers

Whiteflies

Pests Suppressed

Rate
Fl Oz/A

Scales

3.2

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified dosage as a broadcast or directed spray to infested area insuring thorough coverage. Apply this product through properly calibrated ground or aerial application equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control.

Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

CRANBERRY - soil treatment

Pests Controlled

Rate
Fl Oz/A

Rootgrubs (*Scarabaeidae*)

8.0 to 16.0

Rootworms (*Chrysomelidae*)

Restrictions

Pre-Harvest Interval (PHI): **30 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply this product to moist soil. Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. As a soil spray (ground application) directed to the root and crown area using a minimum of 20.0 gallons of water per acre;
2. As a chemigation application with 600 to 1000 gallons water.

Immediately upon application, this product must be incorporated into root-zone by 0.1 to 0.3 inch water per acre, either with the chemigation application or through irrigation/rainfall if not applied through chemigation. Inadequate incorporation within 24 hours of application may result in reduced control.

Rootgrubs and Rootworms

Best control may be achieved when application is made post-bloom immediately after bees are removed.

Applications should target early instar larvae.

This product has not been tested for crop response in tank mixes with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of this product and the desired fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate crop response within 48 hours and for at least two weeks prior to utilizing the tank mix on larger acreage. If crop injury results from the premix test, do not apply the tank mix to larger acreage.

GRAPE - soil treatment

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled

Rate
Fl Oz/A

European fruit lecanium

8.0 to 16.0

Leafhoppers/Sharpshooters

Mealybugs

*Phylloxera** spp.

Pests/Diseases Suppressed

Grapeleaf skeletonizer

12.0 to 16.0

Nematodes

Pierce's disease

Restrictions

Pre-Harvest Interval (PHI): **30 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.
4. For suppression of nematodes, apply 16.0 fluid ounces in a single application or two 8.0 fluid ounces applications on a 30- to 45-day interval. Apply only by 1) chemigation into root-zone through above ground low-pressure drip, trickle, micro-sprinkler, or equivalent equipment; or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root-zone of the plant. Repeated and regular use of Tacoma Ag Imidacloprid 4.0 over several consecutive growing seasons provides the greatest

degree of nematode suppression and yields the greatest plant response. For optimal results, make application(s) between bud-break and the pea-berry stage. A total of 16.0 fluid ounces per acre is recommended under any of the following conditions:

- Where vigorous vine growth is expected;
- In warmer growing areas;
- Where mealybug and European fruit lecanium populations are expected to be heavy;
- Where vine populations exceed 600 per acre, or;
- For suppression of nematodes.

*Repeated and regular use of this product over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

GRAPE – foliar treatment

Including: American bunch grape, Muscadine grape, and Vinifera grape

Pests Controlled	Rate FI Oz/A
Leafhoppers / Sharpshooters	1.2 to 1.6
Mealybugs	
Grape skeletonizer	1.5 to 1.6

Restrictions

Pre-Harvest Interval (PHI): **0 days**

Minimum interval between applications: **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **3.2 fluid ounces per acre** (0.1 pound active ingredient per acre)

Apply Tacoma Ag Imidacloprid 4.0 by ground application only.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

HOP - soil treatment

Pests Controlled	Rate FI Oz/A
Aphids	9.6

Restrictions

Pre-Harvest Interval (PHI): **60 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre)

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. Chemigation into root-zone through low-pressure drop, trickle, micro-sprinkler or equivalent equipment;
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.
4. Use the higher listed dosage where extended residual control is desired or for treating larger vines with dense foliage volume.

HOP – foliar treatment

Pests Controlled	Rate FI Oz/A
Aphids	3.2

Restrictions

Pre-Harvest Interval (PHI): **28 days**

Minimum interval between applications: **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre).

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to

improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

POME FRUIT - soil treatment

Including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled

	Rate Fl Oz/A
Aphids (including woolly apple aphid)	8.0 to 12.0
Leafhoppers	

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

POME FRUIT – foliar treatment

Including: Apples, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled

	Rate Fl Oz/A
Leafhoppers	1.6 to 3.2
Aphids (except woolly apple aphid)	3.2
Apple maggot	
Leafminers	
San Jose scale	

FOR PEAR ONLY:

Mealybugs	8.0
Pear psylla	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre).

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Combine applications targeting apple maggots with an approved sticker at the manufacturer's specified rates.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

POMEGRANATE - soil treatment

Pests Controlled

	Rate Fl Oz/A
Aphids	8.0 to 16.0
Leafhoppers / Sharpshooters	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

POMEGRANATE - foliar treatment

Pests Controlled	Rate Fl Oz/A
Aphids	3.2
Leafhoppers / Sharpshooters	
Whiteflies	
Pests Suppressed	Rate Fl Oz/A
Scales	3.2

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre).

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

STONE FRUIT - soil treatment

Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

In-field, Soil Application

Pests Controlled	Rate Fl Oz/A
Aphids (including woolly apple aphid)	8.0 to 12.0
Leafhoppers	

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Pre-plant, Root Dip Application

Pests Controlled	Rate Fl Oz/10.0 Gal Root-Dip Solution
Black peach aphid (infesting roots)	1.0
Mix this product at 1.0 fluid ounce per 10.0 gallons of water. Thoroughly wet bare-root transplant to slightly above the graft union by soaking roots in the Tacoma Ag Imidacloprid 4.0 solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment.	

STONE FRUIT – foliar treatment

Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

Pests Controlled	Rate Fl Oz/A
Aphids	1.6 to 3.2
Green June beetle	
Japanese beetle	
Leafhoppers / Sharpshooters	
Plant bugs	
Rose chafer	
San Jose scale	
Cherry fruit fly	2.4 to 3.2

Pests Suppressed	Rate Fl Oz/A
Plum curculio	3.2
Stink bugs	

Restrictions for Apricot, Nectarine, Peach:

Pre-Harvest Interval (PHI): **0 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre).

Minimum application volume (water): 50.0 GPA – ground application, 25.0 GPA – aerial application.

Do not apply pre-bloom or during bloom or when bees are foraging.

Restrictions for Cherries, Plums, Plumcot, Prune:

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre).

Minimum application volume (water): 50.0 GPA – ground application, 25.0 GPA – aerial application.

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control.

Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

TROPICAL FRUIT - soil treatment

Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Guava, Jaboticaba, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursap, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled	Rate Fl Oz/A
Aphids	12.0 to 16.0
Avocado lacebug	
Leafhoppers	
Whiteflies	

Pests/Diseases Suppressed

Scales	16.0
Thrips (foliage-feeding thrips only)	

Restrictions

Pre-Harvest Interval (PHI): **6 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

TROPICAL FRUIT - foliar treatment

Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Chermoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled

Rate FI Oz/A

Aphids

3.2

Leafhoppers / Sharpshooters

Mealybugs

Thrips (foliage-feeding thrips only)

Whiteflies

Pests Suppressed

Rate
FI Oz/A

Scales

3.2

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre).

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

TREE NUTS (except Almond) - Soil Treatment

Including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled

Rate
FI Oz/A

Aphids

8.0 to 16.0

Leafhoppers/Sharpshooters

Mealybugs

Spittlebugs

Termites

Whiteflies

Pests/Diseases Suppressed

Pecan scab (from reduction in honeydew deposition)

8.0 to 16.0

Thrips (foliage-feeding thrips only)

16.0

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage prior to or at onset of pest infestation in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
Pre-wet soil prior to applications of this product and allow soil to dry following application and prior to subsequent irrigation;
2. Emitter or spot application in a minimum of 4.0 fluid ounces of mixture/emitter site;
3. Shank or subsurface side-dress, injected to a depth just above or just within the root zone and between the trunk and drip line of the tree canopy. Product should be applied in a minimum of 10.0 gallons per acre using multiple

- shanks on both sides of trees. Ensure product placement is below sod or orchard floor debris. Irrigation covering entire treated area should follow within 48 hours to promote uptake by root system.
4. For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Utilize sufficient carrier volume to penetrate the soil to a depth of 18 to 24 inches to obtain optimum control. Allow soil to dry following treatment and prior to applying any irrigation.

Use the higher listed rates when applied by shank or subsurface side-dress, used on larger trees, soils are high in clay content, high plant populations exist, and/or where extended control is desired. Under some conditions, control may not occur for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.

TREE NUTS (except Almond) - Foliar Treatment

Including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled

	Rate Fl Oz/A
Aphids (except black pecan aphid)	1.5 to 3.0
Leafhoppers/Sharpshooters	
<i>Phylloxera</i> spp. (leaf infestations)	
Spittlebugs	
Whiteflies	
Black pecan aphid	3.0
Mealybugs	
San Jose scale	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **6 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **10.4 fluid ounces per acre** (0.36 pound active ingredient per acre)

Minimum application volume (water); 50.0 GPA – ground application, 25.0 GPA – aerial application.

Do not apply within 10 days prior to bloom or during bloom or when bees are foraging.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout field and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial applications of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

Applications:

Applications for control of San Jose scale should be timed according to crawler stage, treating each successive generation.

Two applications on a 10- to 14-day interval may be required to achieve control.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: [Nonrefillable Container (five gallons or less):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Nonrefillable Container (greater than five gallons):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Tacoma Ag, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, TACOMA AG, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Unintended consequences may result because of such factors as use of the product contrary to label instructions, presence of other materials, or other factors, all of which are beyond the control of Tacoma Ag, LLC or the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Tacoma Ag, LLC election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or

(2) Replacement of amount of product used.

To the extent consistent with applicable law, Tacoma Ag, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Tacoma Ag, LLC is promptly notified of such loss or damage in writing. In no case, to the extent consistent with applicable law, shall Tacoma Ag, LLC be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Tacoma Ag, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

Actara, Centric and Platinum are registered trademarks of a Syngenta Group Company.

Admire, Calypso, Gaucho, Leverage, Provado and Trimax are registered trademarks of Bayer.

Assail and Intruder are registered trademarks of Nippon Soda Company, LTD.

Bidrin is a registered trademark of Amvac Chemical Corporation.

LI 700 is a registered trademark of Loveland Products, Inc.

[EPA approval date]



P.O. Box 14073
Durham, NC 27709
970.590.1949

09.06.2010

To Whom It May Concern:

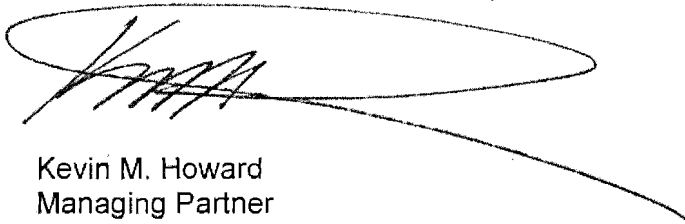
RE: Letter of Authorization

Dear Sir or Madam:

Please let this letter serve to confirm that Pyxis Regulatory Consulting, Inc. is authorized to act as agents for Tacoma Ag, LLC (EPA Company Number 83520), before the U.S. Environmental Protection Agency and state governmental agencies all matters regarding our pesticide registrations pursuant to the Federal insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. 5 136 et seq. and state law.

If you have any questions, please do not hesitate to contact me.

Sincerely,



Kevin M. Howard
Managing Partner

cc: Pyxis Regulatory Consulting, Inc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND
POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION

08/SEPT/2016

SIMILARITY CLINIC MEMORANDUM

Subject: Name of Pesticide Product: Tacoma Ag Imidacloprid 4.0
EPA Reg. No. /File Symbol: 83520-UG
DP Barcode: D435574
Decision No: 520714
Action Code: R300
PC Code: 129099 (imidacloprid)

From: Eugenia McAndrew, Biologist *Eugenia McAndrew*

Through: John C. Redden, M.S., Senior Risk Assessor *JCR*
Chemistry, Inerts and Toxicology Assessment Branch
Registration Division (7505P)

To: Venus Eagle, Risk Manager Team 01
Invertebrate and Vertebrate Branch 3
Registration Division (7505P)

Applicant: Tacoma Ag, LLC
P.O. Box 14073
Durham, NC 27709

FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
Imidacloprid	40.7
Other ingredients:	<u>59.3</u>
Total:	100.0

ACTION REQUESTED: Similarity determination for 83520-UG, proposed product, and 34704-931, cited product.

BACKGROUND: Tacoma Ag, LLC has applied for registration of Tacoma Ag Imidacloprid 4.0, EPA File Symbol 83520-UG, claiming to be substantially similar to Wrangler Insecticide, EPA Reg. No. 34704-931. Both products contain 40.7% imidacloprid. The submission includes a basic CSF dated August 16, 2016, label, data matrix and company letter.

The registrant is using the cite all method of data support to satisfy the acute toxicity data requirements. A search of the OPP electronic databases shows that no acute toxicity data were submitted for the cited product, 34704-931, at registration in 2006 because it was registered as a repack of another product. The registrant submitted its own CSF and amended the registration in 2007.

RECOMMENDATIONS:

1. We compared the basic CSFs and labels of the proposed product, 83520-UG, and the cited product, 34704-931, and determined that the two products are substantially similar.
2. Since no acute toxicity data were submitted for 34704-931, an acute toxicity profile for 83520-UG cannot be generated.
3. Based on the label for 34704-931, the signal word for 83520-UG is "CAUTION." We recommend that the proposed product use the same precautionary labeling as the cited product.
4. The proposed basic CSF submitted for 83520-UG must be reviewed and accepted by the product chemists in the Chemistry, Inerts and Toxicology Assessment Branch.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEE

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION (7505P)

DOCUMENT CONTAINS CONFIDENTIAL INFORMATION

DPBAR CODE NO.: 435573,435903 EPA File Symbol NO.: 83520-UG DECISION NO.: 520714
PC Code: 129099 ACTION CODE: R300
FOOD Use: Yes

DATE OUT: September 28, 2016

SUBJECT: End Use Product Chemistry Review
Product Name: Tacoma Ag Imidacloprid 4.0

FROM: Hari Mukhoty, DVM, PhD.
Product Chemistry Team
CITAB / Registration Division (7505P)

[Handwritten signatures and date]
9/29/16

TO: Jessica Rogala, RMR / Venus Eagle, RM 01
Vertebrate & Invertebrate Branch 3 / Registration Division (7505P)

Company Name: Tacoma Ag, LLC.

INTRODUCTION:

The registrant has submitted a basic CSF (Dated: 08/16/2016) and has also submitted a proposed label for registration of the aforesaid product under EPA File Symbol: 83520-UG. Product chemistry data have been submitted under MRIDs: 499921-01, -03 & -03.

The aforesaid product was manufactured by the [REDACTED]

CITAB has been requested to evaluate the product chemistry data required for registration of the aforesaid product.

SUMMARY OF FINDINGS:

1. Name of Active Ingredient(s): Imidacloprid (40.7%)
2. Has the registrant claimed substantial similarity to registered product?
[X] Yes [] No [] NA If yes: EPA Reg. No. 34704-931
3. The source materials of the active ingredients are registered with the Agency [Yes].
4. The CSF has been screened by inert group and they found that inerts are approved for food use.

DPBAR CODE NO.: 435573,435903 EPA File Symbol NO.: 83520-UG DECISION NO.: 520714
PC Code: 129099 ACTION CODE: R300
FOOD Use: Yes

5. Confidential Statement of Formula(s):

☒ Basic - Dated: 08/16/2016 Re-submitted: NA
☐ Alternate - Dated: Re-submitted: NA

Alternate CSF(s) complies with 40CFR §152.43: ☐ Yes ☐ No NA ☒

6. Product label

a. Ingredient statement: Nominal concentrations of AI listed on CSF(s) concur with product label (PR Notice 91-2).

☐ Yes ☒

Is the sub statement in compliance with PR Notice 97-6?

☒ Yes ☐ No - Uses the term "Other Ingredients"

, if not, explain below:

Metallic equivalent: ☐ Yes ☒ NA
Soluble arsenic: ☐ Yes ☒ NA
Isomeric ratios: ☐ Yes ☒ NA
Acid equivalent: ☐ Yes ☒ NA

b. Health related sub statements:

Petroleum distillate at > 10%: ☐ Yes ☐ No ☒ NA
Methanol at > 4%: ☐ Yes ☐ No ☒ NA
Sodium Nitrate / Sodium Nitrite ☐ Yes ☐ No ☒ NA

c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for: flammability, explosive potential or electric insulator breakdown?

☐ Yes ☒ No

Total Release Fogger PR Notice 98-6 (40 CFR 156.78 d): ☐ Yes ☒ No ☐ NA

d. Label requires an additional Storage and Disposal statement: ☐ Yes ☒ No

Final decision of overall label acceptance will be made by the PM.

DPBAR CODE NO.: 435573,435903 EPA File Symbol NO.: 83520-UG DECISION NO.: 520714
PC Code: 129099 ACTION CODE: R300
FOOD Use: Yes

7. Group A: Product Chemistry Data

CITAB's determination of the acceptability of the data for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		CITAB's Assessment of Data	MRID Nos.
			Yes	No		
830.1550	Product Identity & Composition		X		A	499921-01
830.1600	Description of materials used to produce the product		X	"	A	"
830.1650	Description of formulation process		X	"	A	"
830.1670	Discussion on the formation of impurities		X		A	"
830.1700	Preliminary analysis			NR	NR	
830.1750	Certified limits (158.350)	Standard certified limits	X		A	See CSF dated 08/16/2016/ CLs are standard
		Proposed Limits				
		Justification for wider limits				
830.1800	Enforcement analytical method #		X		A	499921-01

A = Acceptance, NR = Not Required, G = Data Gap,

W = Waiver Request, I = In Progress, NA = Not Acceptable

Analytical Method: Liquid Chromatography was used to quantify active ingredient. Validation data have been submitted for accuracy, precision and linearity.

DPBAR CODE NO.: 435573,435903 EPA File Symbol NO.: 83520-UG DECISION NO.: 520714
PC Code: 129099 ACTION CODE: R300
FOOD Use: Yes

8. Group B:

Guideline No.	Study Title	Value or Qualitative Description	CITAB's Assessment of Data	MRID Nos.
830.6303	Physical State	Liquid	A	499921-02
830.6314	Oxidation/reduction	Rise in Temp (>5°C) with 5% Potassium Permanganate. Change in color with Iron powder at 24 hrs & initial & 24 hrs with Potassium Permanganate.	A	"
830.6315	Flammability	Does not contain any flammable ingredient	A	"
830.6316	Explosibility	Not considered potentially explosive.	A	"
830.6317	Storage stability	In Progress	G	"
830.6310	Miscibility	NA / Product is not to be diluted with Petroleum distillate	A	"
830.6320	Corrosion characteristics	In Progress	G	"
830.7000	pH	7.18	A	499921-02
830.7100	Viscosity	Non-Newtonian fluid. Viscosity goes down with higher motor speed at both 26 & 32°C from 8160 & 7040 centipoise to 382 & 330 centipoise respectively.	A	"
830.7300	Density	1.19 g/cm ³	A	"
830.7520	Particle size	NA / Product does not contain particles or fibres	NA	

A = Acceptable, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress

DPBAR CODE NO.: 435573,435903 EPA File Symbol NO.: 83520-UG DECISION NO.: 520714
PC Code: 129099 ACTION CODE: R300
FOOD Use: Yes

CONCLUSIONS:

CITAB has reviewed the product chemistry data submitted/cited for the end-use product and has concluded that:

A. Substantial similarity to the cited product (Reg. No.) from Product chemistry view point

- ☒ Similar
- ☐ Not similar, give reasons
- ☐ Identical
- ☐ Not identical
- ☐ Not applicable

B. Confidential Statement of formula

1. Basic CSF (dated: 08/16/2016)

- ☒ Acceptable
- ☐ Not Acceptable
- ☐ Not Applicable

If not acceptable provide the reasons

2. Alternate CSF A (dated:)

- ☐ Acceptable - # & #
- ☐ Not Acceptable - #, #
- ☒ Not Applicable

If not acceptable give reasons

C. Group A Product Chemistry Data

- ☒ Acceptable
- ☐ Not acceptable
- ☐ Acceptable with the exception of Guideline(s): (provide the guideline number & explain)
- ☐ Not required
- ☐ Data cited

D. Group B Product chemistry data

- ☐ Acceptable
- ☐ Not acceptable
- ☒ Acceptable with the exception of Guideline(s): (Storage stability 830.6317 & Corrosion characteristic 830.6320)
- ☐ Not required
- ☐ Data cited

E. Product Label/Draft Label

Recommendations – Yes ☐; No ☒

If yes, give recommendations below: Don't mix or allow to coming in contact with Potassium Permanganate. Hazardous chemical reaction may occur".



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION (7505P)

DPBAR CODE NO.: 435573,435903 EPA File Symbol NO.: 83520-UG DECISION NO.: 520714
PC Code: 129099 ACTION CODE: R300
FOOD Use: Yes

DATE OUT: September 28, 2016

SUBJECT: 45/90 days screen results for Product Chemistry Review (End-Use Product)
Product Name: Tacoma Ag Imidacloprid 4.0

FROM: Hari Mukhoty
Product Chemistry Team
Technical Review Branch / Registration Division (7505P)

TO: Jessica Rogala, CRM / Venus Eagle PM - 01
Invertebrate & Vertebrate Branch 3 / Registration Division (7505P)

Company Name: Tacoma Ag, LLC

Active Ingredient(s): Imidacloprid (40.7% / End Use Product)

MRID No(s): 499921-01/ Group A, -02 & -03 / Group B.

CONCLUSIONS: (Following five headings)

Deficiencies: No

(If there are deficiencies they are indicated below each heading as Note 1, Note 2 Etc).

Group A: All data submitted.

Group B: All data submitted (See also Data Matrix)

CSF: Basic CSF (dated: 08/16/2016) submitted.

Draft Product Label: Submitted.

Note to PM: **Any question contact the reviewer.** If the deficiencies are found in the screen results, please inform the registrant and bring back to author of the report the correct deficiencies in response to 10 day letter. The corrected information will be attached to the original been, if the data package is still in the CITAB. New Bean is required in case the Bean has been closed by CITAB. Thank you.

Memorandum

E-SUBMISSION

Date: 8/31/16

To: PM 01, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: ☒ fully accepted submission
☐ partially accepted submission
☐ rejected submission



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

August 31, 2016

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

PYXIS REGULATORY CONSULTING, INC.
TACOMA AG, LLC
4110 136TH ST, CT NW
GIG HARBOR, WA 98332

Report of Analysis for Compliance with PR Notice 11-03

Thank you for your submittal of 22-AUG-16. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 11-03. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.



4110 136TH ST CT NW
GIG HARBOR, WA 98332
T: (253) 853-7369
F: (253) 853-5516
MIKE@PYXISRC.COM

August 22, 2016

MRID 499921-00

ELECTRONIC SUBMISSION

Venus Eagle (PM 1)
Document Processing Desk (**REGFEE**)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202-4501

RE: Tacoma Ag, LLC – Tacoma Ag Imidacloprid 4.0 (EPA Reg. No. 83520-)
Application for New Pesticide Registration

Dear Ms. Eagle,

On behalf of Tacoma Ag, LLC please find the enclosed application for registration of Tacoma Ag Imidacloprid 4.0, an end-use product containing imidacloprid as the active ingredient. In support of this application, we submit the following documents:

1. Application for Registration (EPA Form 8570-1)
2. Receipt of PRIA pre-payment from pay.gov
3. Confidential Statement of Formula (Basic Formulation dated August 16, 2016)
4. Formulators Exemption Statement (EPA Form 8570-27)
5. One (1) copy of the proposed labeling
6. Certification with Respect to Citation of Data (EPA Form 8570-34)
7. Agency Internal Use Copy of the Data Matrix (EPA Form 8570-35)
8. Public File Copy of the Data Matrix (EPA Form 8570-35)
9. Letter of Authorization
10. Product Specific Data:

MRID	Guideline	Report Title
49992101	830.1550, 830.1600, 830.1650, 830.1670, 830.1700, 830.1750, 830.1800	Leopard, B. Tacoma Ag Imidacloprid 4.0 Product Chemistry Volume II. Product Identity and Composition, Description of Materials Used to Produce the Product, Description of the Formulation, Process, Discussion of Formation of Impurities, Preliminary Analysis, Certified Limits and Enforcement Analytical Methods.
49992102	830.6302, 830.6303, 830.6304, 830.6314, 830.7000, 830.7100, 830.7300	Theus, S. Final Report for: Physical and Chemical Characteristics of Imidacloprid 4SC (amended).
49992103	830.6313, 830.6315, 830.6316, 830.6317,	Kellogg, M. Waiver Request for Certain Data Requirements for Tacoma Ag Imidacloprid 4.0.

MRID	Guideline	Report Title
	830.6319, 830.6320, 830.6321, 830.7050, 830.7200, 830.7220, 830.7370, 830.7520, 830.7550-830.7570, 830.7840-830.7860, 830.7950	

Tacoma Ag, LLC believes its product, Tacoma Ag Imidacloprid 4.0, is substantially similar to a currently registered product (EPA Reg. No. 34704-931).

Tacoma Ag, LLC believes this application falls under Category R300 (44) since Tacoma Ag Imidacloprid 4.0 is a new product, substantially similar in composition and use to a registered product, only product chemistry data are being submitted to support the application for registration and the cite-all method is being used to support product specific acute toxicity data requirements. In addition, the technical source of active ingredient is based on a registered source of supply and therefore, Tacoma Ag Imidacloprid 4.0 qualifies for Formulators Exemption for imidacloprid generic data requirements.

We trust you will find this application complete and in compliance with the requirements for registration under FIFRA. Please feel free to call me if you have any questions or need any additional information.

Sincerely,



Michael Kellogg

Enclosures

cc: W. Lohman; Tacoma Ag, LLC

[Note to reviewer: [Text] in brackets denotes optional text].

[Note to reviewer: {Text} in braces denotes where in the final label text will appear.]

~~{BOOKLET FRONT PANEL LANGUAGE}~~

Food Use

Tacoma Ag Imidacloprid 4.0

GROUP 4A INSECTICIDE

ACTIVE INGREDIENT:

Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	40.7%
OTHER INGREDIENTS	59.3%
TOTAL	100.0%

Contains 4.0 pounds of imidacloprid per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

SHAKE WELL BEFORE USING

See inside label booklet for First Aid, Precautionary Statements and Directions for Use.

additional

EPA Reg. No. 83520-xx

Net Contents:

EPA Est. No.

Manufactured for:

Tacoma Ag, LLC
P.O. Box 14073
Durham, NC 27709

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
Note to Physician: No specific antidote is available. Treat the patient symptomatically.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical resistant to this product are listed below. More options can be obtained by following the instructions for Category C on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long sleeved shirt and long pants,
- Chemical resistant gloves made of any waterproof material such as, nitrile rubber, butyl rubber, neoprene rubber, barrier laminate, polyethylene, polyvinyl chloride (PVC) or viton,
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove Personal Protective Equipment immediately after handling this product.
- Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

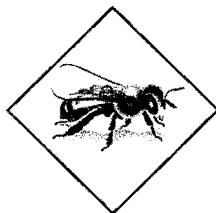
Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Phys. Chem. Hazards
"Don't mix or allow to come into contact w/ Potassium permanganate. Hazardous chemical reaction may occur"

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

PROTECTION OF POLLINATORS



APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications.
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: <http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency.

For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed and commercially grown ornamentals that are attractive to pollinators:



FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met:

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

FOR FOOD/FEED CROPS AND COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55 °F



- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR part 170.

This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is:

- Coveralls,
- Chemical-resistant gloves made of any waterproof material such as, nitrile rubber, butyl rubber, neoprene rubber, natural rubber, barrier laminate, polyethylene, polyvinyl chloride (PVC) or viton, and
- Shoes plus socks.

TAKE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

Spray Drift Management

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

Mixing and Loading

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading areas and potential surface to groundwater conduits such as field sumps, uncased well head, sinkholes or field drains.

For Aerial Applications

Mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices. Use the minimum practical boom length, do not exceed 75% of the wing span or rotor diameter.

Release spray at the lowest possible height consistent with good pest control and flight safety. Do not make applications more than 10 feet above the crop canopy.

Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150 to 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, make applications to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.

Wind Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

No-Spray Zone Requirements for Soil and Foliar Applications

Do not apply by ground within 25 feet, or by air within 150 feet of lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries and commercial fish farm ponds.

Airblast (Air Assist) Specific Applications for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vineyards via a radially, or laterally directed air stream. The following specific drift management practices should be followed:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows).
- Only spray inward, toward the orchard or vineyard, for application to the outside rows.

Runoff Management

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip.

When used on erodible soils, use best management practices for minimizing runoff. Consult your local Natural Resources Conservation Service for recommendations in your use area.

Endangered Species Notice

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent or Pesticide State Lead Agency for information concerning endangered species in your area.

Resistance Management

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

Tacoma Ag Imidacloprid 4.0 contains a Group 4A insecticide called imidacloprid. Insect biotypes with acquired or inherent tolerance to Group 4A products may eventually dominate the insect population if Group 4A products are used repeatedly as the pre-dominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by Tacoma Ag Imidacloprid 4.0 and to other Group 4A products.

The active ingredient in Tacoma Ag Imidacloprid 4.0 is a member of neonicotinoid chemical group. Insect pests resistant to other chemical classes have not shown cross-resistant to this product. In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, for each crop season: 1) make only a single soil application of Tacoma Ag Imidacloprid 4.0; 2) foliar applications of products from the same class may not be made following a long residual soil application of Tacoma Ag Imidacloprid 4.0 or other neonicotinoid products.

If a soil application of Tacoma Ag Imidacloprid 4.0 has not been made during a crop season and foliar applications are to be made, avoid using a block of more than three consecutive applications of Tacoma Ag Imidacloprid 4.0 and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Tacoma Ag, LLC strongly encourages the rotation to a block of applications with effective products from a different mode of action before using additional applications of neonicotinoid products. Using a block of rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Do not make foliar applications of Tacoma Ag Imidacloprid 4.0 or other Group 4A products on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

Other Group 4A neonicotinoid products used as foliar treatments include: Actara®, Assail®, Calypso®, Centric®, Intruder®, Leverage® and Provado®. Other 4A Group neonicotinoid products used as soil treatment include: Admire® and Platinum®.

Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org/>.

APPLICATION DIRECTIONS

For soil applications of Tacoma Ag Imidacloprid 4.0, direct product into the seed or root zone of crop. Failure to place Tacoma Ag Imidacloprid 4.0 into root zone may result in loss of control or delay in onset of activity. Tacoma Ag Imidacloprid 4.0 may be applied with ground or chemigation application equipment.

Do not apply this product in enclosed structures such as planthouses or greenhouses.

Apply foliar applications of Tacoma Ag Imidacloprid 4.0 as directed or a broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment, and spray adjuvant if necessary to obtain thorough coverage. Failure to provide adequate coverage and retention of Tacoma Ag Imidacloprid 4.0 on leaves and fruit may result in loss of insect control or delay in onset of activity. Apply Tacoma Ag Imidacloprid 4.0 with properly calibrated ground or aerial application equipment. Minimum spray volumes, unless otherwise specified on crop-specific application sections, are 10.0 gallons per acre by ground and 5.0 gallons per acre by air. This product may also be applied by overhead chemigation (see additional information in **CHEMIGATION** section of this label below), if allowed in crop-specific application section.

When applied as a soil application, optimum activity of Tacoma Ag Imidacloprid 4.0 results from applications to the root zone of plants to be protected. The earlier this product is available to the developing plant, the earlier the protection begins. Tacoma Ag Imidacloprid 4.0 is continuously taken into the roots over a long period of time, and the systemic nature of Tacoma Ag Imidacloprid 4.0 allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in extended residual activity of Tacoma Ag Imidacloprid 4.0, the control of insects, and the prevention and/or reduction of virus transmission or symptom expression, and plant health benefits. The rate of Tacoma Ag Imidacloprid 4.0 applied affects the length of the plant protection period. Use higher listed rates when infestations occur later in crop development or where pest pressure is continuous. Tacoma Ag Imidacloprid 4.0 will generally not control insects infesting flowers, blooms, or fruit. Additional crop protection may be required for insects feeding in or on these plant parts, and for insects not listed in crop-specific, pest-controlled sections of this label. Additionally, specific Tacoma Ag Imidacloprid 4.0 application instructions are also provided in the crop-specific sections of this label.

Suppression, or less than complete control of certain insect pests that may carry diseases including reduced feeding, may also result from a Tacoma Ag Imidacloprid 4.0 application. Complete control of these pests may require supplemental control measures.

Generally, this product is not used on crops grown for production of true seed intended for private or commercial planting but may be allowed under state-specific, 24(c) labeling. Additional information on Tacoma Ag Imidacloprid 4.0 uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCA's, consultants, or local Tacoma Ag, LLC representatives.

Apply only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in nonsoil such as perlite, vermiculite, rock wool, or other soilless media, or plants growing hydroponically.

Pre-mix Tacoma Ag Imidacloprid 4.0 with water or other appropriate diluent prior to application. Keep Tacoma Ag Imidacloprid 4.0 and water suspension agitated to avoid settling.

Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient imidacloprid per acre per year, including seed treatment, soil, and foliar uses, unless specified within a crop-specific application section for a given crop.

MIXING INSTRUCTIONS

Minimum spray volumes are 10.0 gallons per acre by ground application and 5.0 gallons per acre through aerial

equipment. To prepare the application mixture, add half of the required amount of water to the spray tank and with agitation add Tacoma Ag Imidacloprid 4.0. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. Tacoma Ag Imidacloprid 4.0 may also be used with other pesticides and/or fertilizer solutions. Please see Compatibility Note below. When tank mixtures of this product and other pesticides are involved, prepare the tank mixture as instructed above and follow Mixing Order below.

Mixing Order

When pesticide mixtures are needed, add wettable powders first, Tacoma Ag Imidacloprid 4.0 or other flowables second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer-pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

Compatibility Note

Test compatibility of the intended tank mixture before adding this product to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order, to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Do not use if poor mixing or formation of precipitates that do not readily re-disperse. This indicates an incompatible mixture. For further information, contact your local Tacoma Ag, LLC representative.

Chemigation

Types of Irrigation Systems: Foliar chemigation applications of this product may be made to crops through overhead sprinkler systems if specified in crop-specific application sections. Soil chemigation application of Tacoma Ag Imidacloprid 4.0 may only be made to crops through chemigation as specified in crop-specified application sections and only through low-pressure systems specifically for a given crop. Do not apply this product through any other type of irrigation system. Make foliar chemigation applications of this product as concentrated as possible. Retention of Tacoma Ag Imidacloprid 4.0 on target site of insect infestation is necessary for optimum activity. Do not use chemigation of Tacoma Ag Imidacloprid 4.0 in water volumes exceeding 0.10 inch per acre. See crop-specific application sections of the label for more information.

Uniform Water Distribution and System Calibration: The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have any questions about calibration, contact Cooperative Extension Service specialists, equipment manufacturers, or other experts.

Chemigation Monitoring: A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Drift: Do not apply when wind speed favors drift beyond the area intended for treatment.

Required System Safety Devices: The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems: Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, back flow preventer (RPZ), or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the

reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

ROTATIONAL CROPS*

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exist for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

IMMEDIATE PLANT-BACK:

All crops on this label plus the following crops not on this label: Barley, Canola, Corn (field, sweet and pop), Mustard seed, Rapeseed, Sorghum, Sunflower, Watercress, Wheat and all crops from the following Crop Groups as recognized and defined by EPA.

ROOT VEGETABLES – Crops of Crop Group 1

BULB VEGETABLES - Crops of Crop Group 3-07

LEAFY GREEN VEGETABLES – Crops of Crop Group 4

HEAD and STEM BRASSICA VEGETABLES - Crops of Crop Group 5

LEGUME VEGETABLES - Crops of Crop Group 6 including: Edible Podded plus Dried plus Succulent Shelled, Peas and Beans

FRUITING VEGETABLES - Crops of Crop Group 8

CUCURBIT VEGETABLES - Crops of Crop Group 9

CITRUS - Crops of Crop Group 10

POME FRUIT - Crops of Crop Group 11

STONE FRUIT - Crops of Crop Group 12

BUSHBERRY and CANEBERRY - Crops of Crop Group 13-07

HERBS - Crops of Crop Group 19A

TROPICAL FRUIT – Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Llama, Jaboticaba, Guava, Longan, Lychee, Mamey sapote, Mango, Papaya, Passion fruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

30-DAY PLANT-BACK:

Cereals (including buckwheat, millet, oats, rice, rye, and triticale), soybeans and safflower

10-MONTH PLANT-BACK:

Onion and bulb vegetables

12-MONTH PLANT-BACK:

All Other Crops

*Cover crops for soil building or erosion control may be planted any time; but do not graze or harvest for food or feed.

APPLICATION INFORMATION

Apply this product with properly calibrated ground or aerial application equipment. Apply specified rate per acre as a directed or broadcast spray to infested area at earliest threshold for target pest, as population begins to develop. Thorough uniform coverage of all plant parts is required to achieve optimum control. Scout fields and retreat if needed.

The lower rates can be used early season when pest pressures are low or when tank-mixing with other effective products registered for target insect control. Degree of control or suppression of additional labeled pests will be determined, in part, by the stage of pest development at application and infestation level of those pests. Tacoma Ag Imidacloprid 4.0 provides optimal performance against early instar and early nymphal stages of insects as well as bollworm/budworm eggs. Applications made with less than 5.0 gallons per acre may result in slower activity and/or less overall control from a single application than an application made with higher gallonages. Use an organosilicone-based spray adjuvant for applications targeting aphids and whiteflies.

Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient imidacloprid per acre per year, including seed treatment, soil, and foliar uses, unless specified within a crop-specific application section for a given crop.

GLOBE ARTICHOKE* - soil treatment

Pests Controlled

Rate

Fl Oz/A

Aphids

8.0 to 16.0

Leafhoppers

Restrictions:

Pre-Harvest Interval (PHI): 7 days

Maximum Tacoma Ag Imidacloprid 4.0 amount allowed per year when making soil applications: 16 .0 fluid ounces per acre (0.50 pound active ingredient per acre)

Applications

Apply specified dosage in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. In-furrow spray at planting directed on or below seed.

*Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

GLOBE ARTICHOKE – foliar treatment

Pests Controlled

Rate
Fl Oz/A

Aphids 1.6 to 4.0

Leafhoppers

Restrictions:

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16 .0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700® to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

HERBS - soil treatment

Including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Camomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood.

Pests Controlled

Rate
Fl Oz/A

Aphids 8.0 to 12.0

Flea beetles

Leafhoppers

Whiteflies

Pests/Diseases Suppressed

Thrips (foliage-feeding thrips only) 8.0 to 12.0

Restrictions:

Pre-Harvest Interval (PHI): **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. In-furrow spray or transplant-water drench during setting or transplanting;
3. Shankd-into or below eventual seed-line;
4. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Tacoma Ag, LLC strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

HERBS – foliar treatment

Including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

Pests Controlled	Rate Fl Oz/A
Aphids	1.4
Flea beetles	
Leafhopper	
Whiteflies	

Restrictions:

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per season when making foliar applications: **4.2 fluid ounces per acre** (0.13 pound active ingredient per acre)

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Apply this product through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for optimal control. The addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's specified use rate may improve coverage and control.

Note: Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, treat only a small area or small number of plants of each listed above and evaluate prior to commercial use.

FIELD CROPS **Application Instructions**

COTTON - Soil Treatment

Pests Controlled	Rate Fl Oz/1000 Row-Ft	Rate Fl Oz/A
Cotton aphid	0.65	8.5 to 10.5
Plant bugs		(Depending on row-spacing)
Thrips		
Whiteflies		

Restrictions

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **10.5 fluid ounces per acre** (0.33 pound active ingredient per acre)

Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient of this product, Provado, Trimax® or Leverage per acre per year, including seed treatment as Gaucho®, soil and foliar uses. Do not apply more than a total of 6 applications of the active ingredient per year. Do not graze treated fields after any application of this product. Please see Resistance Management section of this label.

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
3. Chemigation into root-zone through low-pressure drip or trickle irrigation.

COTTON - Foliar Treatment

Pests Controlled	Rate Fl Oz/A
Bandedwinged whitefly	1.0 to 2.0
Bollworm/Budworm (ovicidal effect)	
Cotton aphid	
Cotton fleahopper	
Green stink bug	
Plant bugs (excludes <i>Lygus hesperus</i>)	
Southern green stink bug	
Pests Suppressed	
Lygus bug (<i>Lygus hesperus</i>)	1.5 to 2.0
Whiteflies (other than bandedwinged whitefly)	

Restrictions

Pre-Harvest (PHI): **14 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **10.0 fluid ounces per acre** (0.31 pound active ingredient per acre)

Regardless of formulation or method of application, apply no more than 0.5 pound active ingredient per acre per year, including seed treatment, soil and foliar uses.

Apply this product through properly calibrated ground, aerial, or chemical application equipment.

Maximum number of Tacoma Ag Imidacloprid 4.0 applications per year: **5**

Do not graze treated fields after any application of this product.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

TANK MIX INFORMATION

Pests Controlled (In addition to pests listed above)	Tacoma Ag Imidacloprid 4.0 Rate Fl Oz/A	Bidrin® 8* Rate Fl Oz/A
For early season control of: Thrips	1.0 to 1.5	1.6 to 3.2
For mid to late season control of: Cotton leaf perforator Grasshoppers Plant bugs Saltmarsh caterpillar Stink bugs (including Brown stink bug)	1.0 to 1.5	4.0 to 8.0

Restrictions (in addition to Restrictions listed above)

*Refer to the Bidrin 8 product label; follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.

PEANUT*- soil treatment

Pests Controlled	Rate Fl Oz/A
Aphids Leafhoppers Whiteflies	8.0 to 12.0
Pest Suppressed	
Thrips	8.0 to 12.0

Restrictions:

Pre-Harvest Interval (PHI): **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Applications:

Apply specified dosage in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Notes

Increases in Tomato spotted wilt virus (TSWV) incidence have been observed with applications of Tacoma Ag Imidacloprid 4.0 on multiple varieties of peanut. This may also be the case with other tospoviruses, or other viruses transmitted by various thrips species or perhaps, other pests. Prior to applying this product to Peanuts, Tacoma Ag, LLC recommends consultation with the State, Cooperative Extension Service, or Tacoma Ag, LLC representative, for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or other tospovirus are endemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia, Tomato spotted wilt virus index, before applying this product.

*Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

POTATO - soil treatment

Pests Controlled	Rate Fl Oz/1000 Row-Ft	Rate Fl Oz/A
Aphids	0.45 to 0.65	6.5 to 10.0
Colorado potato beetle		
Flea Beetles		
Leafhoppers		
Potato psyllid		
Pests/Diseases Suppressed		
Symptoms of:		
Net necrosis (PLRV)	0.45 to 0.65	6.5 to 10.0
Potato leaf roll virus (PLRV)		
Potato yellows		
Wireworms (with in-furrow spray at-planting)		

Restrictions

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **10.0 fluid ounces per acre** (0.31 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. In-furrow spray during planting directed on seed pieces or seed potatoes;
2. Subsurface side-dress on both sides of the row covered with 3 or more inches of soil;
3. Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil;
4. Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective pest control or suppression, Tacoma Ag Imidacloprid 4.0 applications must be placed below soil-surface and in contact with seed piece or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of this product may be made in a 2 to 4 inch band (width of planter shoe opening) and completely covered.

POTATO**(Seed Piece Treatment)**

Pests Controlled	Rate Fl Oz/100 Lb Seed	Rate Fl Oz/A**
Aphids	0.2 to 0.4	4.0 to 8.0
Colorado potato beetle		
Flea beetles		
Leafhoppers		
Potato Psyllid		
Wireworms (seed-piece protection)		
Pests/Diseases Suppressed		
Symptoms of:		
Net necrosis (PLRV)	0.4	8.0
Potato leaf roll virus (PLRV)		
Potato yellows		

Restrictions

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making seed-piece treatment applications: **10.0 fluid ounces per acre** (0.31 pound active ingredient per acre)

Do not use treated seed-pieces for food, feed, or fodder. Do not apply any subsequent application of Tacoma Ag Imidacloprid 4.0 (in-furrow), Gaucho, Leverage or Provado following a Tacoma Ag Imidacloprid 4.0 seed-piece treatment.

Instructions

Apply specified dosage as a diluted spray onto seed-pieces using a shielded spray system. Dilute with 3 parts water, or less, to 1 part Tacoma Ag Imidacloprid 4.0. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after Tacoma Ag Imidacloprid 4.0 application. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Plant seed-pieces as soon as possible after treating avoiding prolonged exposure of Tacoma Ag Imidacloprid 4.0 treated seed-pieces to sunlight and in accordance with the directions of your local Extension specialist.

Consult your local Tacoma AG, LLC representative or crop protection product dealer for information relevant to your area.

****Based on a seeding rate of 2000 pounds per acre.**

POTATO - foliar treatment**Pests Controlled****Rate FI Oz/A**

Aphids

1.52

Colorado potato beetle

Flea beetles

Leafhoppers

Psyllids

Restrictions:Pre-Harvest Interval (PHI): **7 days**Minimum interval between applications: **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **6.4 fluid ounces per acre** (0.2 pound active ingredient per acre)**Applications**

Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

TOBACCO - soil treatment**Pests Controlled**

Rate
FI Oz/1000 Plants
(as seedling tray drench)

Rate
FI Oz/1000 Plants
(in-furrow or transplant-water)

Aphids

0.5

0.7

Flea beetles

Mole crickets

0.7 to 1.4

0.9 to 1.4

Whiteflies

Wireworms

Pests/Diseases Suppressed

Cutworms

0.7 to 1.4

0.9 to 1.4

Symptoms of:

Tomato spotted wilt virus (TSWV)

RestrictionsPre-Harvest Interval (PHI): **14 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications or foliar sprays to seedlings: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)**Instructions**

Apply specified dosage of this product in one of the following methods:

1. Uniform, broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting followed immediately by overhead irrigation to wash Tacoma Ag Imidacloprid 4.0 from foliage into potting media. Failure to wash this product from foliage may result in reduction in pest control. Transplants must be handled carefully during setting to avoid dislodging treated potted media from roots.
2. In-furrow spray or transplant-water drench during setting.
3. Chemigation into root-zone through low-pressure drip, trickle, micro sprinkler or equivalent equipment.

Important Note: Proper tray drench applications of this product have been shown to be the most efficacious method of application. However, the specified rate of Tacoma Ag Imidacloprid 4.0 may be applied as a combination of the tray drench in the planthouse and/or transplant-water drench in field. Adverse growing conditions may cause a delay in uptake of this product into the plant and a delay in control.

TOBACCO – foliar treatment**Pests Controlled****Rate FI Oz/A**

Aphids

0.8 to 1.6

Flea beetles

1.6

Japanese beetles

RestrictionsPre-Harvest Interval (PHI): **14 days**Minimum interval between applications: **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **8.9 fluid ounces per acre** (0.28 pound active ingredient per acre)

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

VEGETABLE and SMALL FRUIT CROPS

Application Directions

Restrictions

Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

BRASSICA (COLE) LEAFY VEGETABLES - soil treatment

Including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (*gai lan*) broccoli, Chinese (*bok choy*) cabbage, Chinese (*napa*) cabbage, Chinese mustard (*gai choy*) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip tops (leaves)

AND

LEAFY VEGETABLES - soil treatment

Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Raddicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian Spinach)), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled

Rate
Fl Oz/A
(on 36 inch rows)

Aphids
Leafhoppers
Thrips (foliage feeding thrips only)
Whiteflies

5.0 to 12.0

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.
7. Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

BRASSICA (COLE) LEAFY VEGETABLES¹ – foliar treatment

Including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (*gai lan*) broccoli, Chinese (*bok choy*), cabbage, Chinese (*napa*) cabbage, Chinese mustard (*gai choy*) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip tops (leaves)

Pests Controlled

Rate
Fl Oz/A

Aphids
Flea beetles
Leafhoppers
Whiteflies

1.5

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making foliar applications: **7.68 fluid ounces per acre** (0.24 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

LEAFY VEGETABLES¹ – foliar treatment

Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum, (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	Rate Fl Oz/A
Aphids	1.5
Flea beetles	
Leafhoppers	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making foliar applications: **7.6 fluid ounces per acre** (0.24 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. Tacoma Ag Imidacloprid 4.0 may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

For applications made to watercress, production fields must be drained of water at least 24 hours prior to application, and water must not be reapplied to the field for a minimum of 24 hours following the applications. Applications must be made to fully leafed-up canopies only.

LEAFY PETIOLE VEGETABLES - soil treatment

Including: Cardoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only), Florence fennel (including sweet anise, sweet fennel, Finocchio), Rhubarb, Swiss chard

Pests Controlled	Rate Fl Oz/A
Aphids	5.0 to 12.0
Leafhoppers	
Thrips (foliage feeding thrips only)	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **45 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root zone.
7. Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

BULB VEGETABLES (*Allium* sp.)¹ - soil treatment

Including: Chinese chive (fresh leaves), Chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic (common group, great-headed group, serpent group), Kurrat group, Leek group (including common, lady's and wild), Lily (bulb), Onion (bulb and green leaves including: common group, Beltsville bunching, Chinese bulb, fresh, green, macrostem, Pearl group, potato onion group, tree onion-tops, Welsh-tops), Shallot, plus cultivars, varieties, and/or hybrids of these.

Pests Controlled	Rate Fl Oz/A
Thrips (foliage feeding thrips only)	16.0

Restrictions:

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Applications made to higher organic matter soils may result in reduced or shortened activity on pest.

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Instructions

Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
4. Post-seeding drench, transplant-water drench, or hill drench.

CUCURBIT VEGETABLES - soil treatment

Including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon, and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

Field application instructions. See details below for additional planthouse instructions.

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 12.0
Cucumber beetles	
Leafhoppers	
Thrips (foliage-feeding thrips only)	
Whiteflies	

Pests/Diseases Suppressed

Bacterial wilt (as vectored by various cucumber beetles)	8.0 to 12.0
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Leaf silvering resulting from whitefly feeding

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

Planthouse Application Instructions*

Pests Controlled	Rate Fl Oz/1000 Plants
Aphids	0.05
Whiteflies	

Restrictions

Maximum amount of Tacoma Ag Imidacloprid 4.0 applied in the planthouse: **0.05 fluid ounce** (0.00156 pound active ingredient) per **1000 plants**.

Maximum number Tacoma Ag Imidacloprid 4.0 applications in planthouse: **1**

Instructions:

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:

1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash this product from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash this product from foliage may result in reduced pest control;
2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher listed rates or increased number of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.

Not all varieties of cucurbit vegetables have been tested for tolerance to Tacoma Ag Imidacloprid 4.0 applied to seedling flats. Therefore, treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

*Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

FRUITING VEGETABLES¹ - soil treatment

Including: Eggplant, Ground cherry, Okra, Pepinos, Pepper (including bell, chili, cooking, pimento and sweet) Tomato, and Tomatillo

Field application instructions. See details below for additional planthouse instructions.

Pests Controlled

	Rate Fl Oz/A
Aphids	Okra and Pepper
Colorado potato beetle	8.0 to 16.0
Flea beetles	
Leafhoppers	
Thrips (foliage-feeding thrips, only)	Other Crops
Whiteflies	8.0 to 12.0

Pests/Diseases Suppressed

Symptoms of:	Okra and Pepper
Tomato mottle virus	8.0 to 16.0
Tomato spotted wilt virus	Other Crops
Tomato yellow leaf curl virus	8.0 to 12.0

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed on pepper and okra crops per crop season when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Maximum Tacoma Ag Imidacloprid 4.0 allowed on other fruiting crops per crop season when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

Planthouse Application Instructions²

Pests Controlled

	Rate Fl Oz/1000 Plants
Aphids	0.05
Whiteflies	

Restrictions

Maximum amount of Tacoma Ag Imidacloprid 4.0 applied in the planthouse: **0.05 fluid ounce** (0.00156 pound active ingredient) per **1000 plants**.

Maximum number Tacoma Ag Imidacloprid 4.0 applications in planthouse: **1**

Instructions

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:

1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash this product from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash this product from foliage may result in reduced pest control;
2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection.

Applications of higher listed rates or increased number of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid dislodging treated potted media from roots.

Not all varieties of fruiting vegetables have been tested for tolerance to Tacoma Ag Imidacloprid 4.0 applied to seedling flats. Therefore treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

²Use not permitted in CA unless otherwise directed by state-specific 24(c) labeling.

FRUITING VEGETABLES¹ – foliar treatment

Including: Eggplant, Ground cherry, Okra, Pepinos, Pepper (including bell, chili, cooking, pimento, and sweet), Tomato, and Tomatillo

Pests Controlled	Rate Fl Oz/A
Aphids	1.5 to 2.4
Colorado potato beetle	
Leafhoppers	
Whiteflies	
Pepper weevil	2.4

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making foliar applications: **7.6 fluid ounces per acre** (0.24 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

For pepper weevil, apply specific dosage of Tacoma Ag Imidacloprid 4.0 by ground equipment only, timing applications prior to a damaging population becoming established. Good coverage of foliage and fruit is necessary for optimum control. Applications of this product must be incorporated into a full-season program where alternations of effective products from multiple classes of chemistry and different modes of action are utilized in a blocked or windowed approach.

For additional information, please contact your Tacoma Ag, LLC representative, Extension Specialist, or crop advisor. When targeting adult whiteflies, use higher listed rates.

LEGUME VEGETABLES except soybean, dry - soil treatment

Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean
Bean (*Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)

Bean (*Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)

Other Beans and Peas (Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean)

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 12.0
Leafhoppers	
Thrips (foliage feeding thrips, only)	
Whiteflies	
Pests/Diseases Suppressed	
Symptoms of:	8.0 to 12.0
Bean common mosaic virus (BCMV)	
Bean golden mosaic virus (BGMV)	
Beet curly top hybrigeminivirus (BCTV)	

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. In-furrow spray at planting directed on or below seed;
3. In a narrow (2" or less) surface band over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours following application;
4. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
5. As a post-seeding drench, transplant drench, or hill drench.
6. Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

LEGUME VEGETABLES¹ except soybean, dry - foliar treatment

Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean

Bean (*Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)

Bean (*Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)

Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

Pests Controlled	Rate Fl Oz/A
Aphids	1.4
Leafhoppers	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making foliar applications: **4.2 fluid ounces per acre** (0.13 pound active ingredient per acre)

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required

to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

ROOT VEGETABLES* - soil treatment

Including: Beet (garden)¹, Burdock (edible)¹, Carrot¹, Celeriac¹, Chervil (turnip-rooted)¹, Chicory¹, Ginseng, Horseradish, Kava^{1,2}, Parsley (turnip-rooted), Parsnip¹, Radish¹, Oriental radish (daikon)¹, Rutabaga¹, Salsify (oyster plant), Salsify (black)¹, Salsify (Spanish), Skirret and Turnip¹

Pests Controlled	Rate Row-Ft	FI Oz/1000 Rate FI Oz/A
Aphids	0.35 to 0.8	5.0 to 12.0
Flea beetles		
Leafhoppers		
Thrips (foliage-feeding thrips only)		
Whiteflies		

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Maximum Tacoma Ag Imidacloprid 4.0 applications per crop season: **1**

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray (rate specified per 1000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting;
3. In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting.

Important Note: The rate applied affects the length of control. Use higher listed rates where infestations occur later in crop development, or where pest pressure is continuous. Tacoma Ag Imidacloprid 4.0 rates less than 0.7 fluid ounce per 1000 row-feet will not provide adequate residual pest control. Tacoma Ag Imidacloprid 4.0 treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

Tops or greens from these crops may be utilized for food or feed.

²Use not permitted in California unless otherwise directed by state-specific 24(c) labeling

*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

ROOT VEGETABLES¹ – foliar treatment

Including: Beet (garden)², Burdock (edible)², Carrot², Celeriac², Chervil (turnip-rooted)², Chicory², Ginseng, Horseradish, Kava^{2,3}, Parsley (turnip-rooted), Parsnip², Radish², Oriental radish (daikon)², Rutabaga², Salsify (oyster plant), Salsify (black)², Salsify (Spanish), Skirret, Turnip²

Pests Controlled	Rate FI Oz/A
Aphids	1.4
Flea beetles	
Leafhoppers	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making foliar applications: **1.4 fluid ounces per acre** (0.044 pound active ingredient per acre) on Radish, **4.2 fluid ounces per acre** (0.13 pound active ingredient per acre) on other crops. Maximum Tacoma Ag Imidacloprid 4.0 application(s) per crop season: **1 on radish, 3 on all other crops.**

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

²Tops and greens from these crops may be utilized for food or feed.

³Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for

knockdown of pests or for improved control of other pests.

SOYBEAN* - foliar treatment

Pests Controlled	Rate Fl Oz/A
Aphids	1.5
Bean leaf beetle	
Cucumber beetles/Rootworm adults	
Japanese beetle (adults)	
Leafhoppers	
Whiteflies	

Restrictions:

Pre-Harvest Interval (PHI): **21 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 amount allowed per year when making foliar applications: **4.5 fluid ounces per acre** (0.14 pound active ingredient per acre)

**Use not permitted in California or New York unless otherwise directed by state-specific 24(c) labeling.*

STRAWBERRY¹ - soil treatment

Annual and Perennial Crops Pests Controlled	Rate Fl Oz/A
Aphids	12.0 to 16.0
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment after plants are established or on perennial crops in early spring prior to bud opening;
2. As a plant material or plant hole treatment just prior to, or during transplanting.
3. As a band spray over-the-row in a minimum of 20.0 gallons of water per acre, followed immediately by overhead irrigation to incorporate product into root zone. Do not use plastic or other mulches that limit movement of this product into root zone.

The rate applied affects the length of control. Use higher listed rates where infestations may occur later in crop development or where pest exposure is continuous.

Post-harvest Use on Perennial Crops

Pests Controlled	Rate Fl Oz/A
White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle, Oriental beetle)	8.0 to 12.0

Restrictions

Pre-Harvest Interval (PHI): **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre).

Instructions

Apply a single application **post-harvest to coincide with renovation of strawberry fields** and during active egg-laying period of beetles. Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. As a ground spray via boom or backpack sprayer in a minimum of 20.0 gallons of water per acre;
2. As a row-band spray using an adjusted amount of product based on the treated row band area in proportion to the amount required per full acre. The bandwidth should be equivalent to the width of the anticipated fruiting bed;
3. As a chemigation application with 600 to 1000 gallons of water followed by 0.10 to 0.25 inches irrigation.

Important: All soil-surface applications must be followed by 0.25 inches of rainfall or overhead irrigation water per acre within 2 hours of application. Failure to adequately incorporate this product into egg-deposition zone may result in decreased activity of beetle grubs.

¹Do not use both application methods on the same crop in the same season.

STRAWBERRY – foliar treatment

Pests Controlled

Rate
FI Oz/A

Aphids	1.5
Spittlebugs	
Whiteflies	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **5 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per crop season when making foliar applications: **4.5 fluid ounces per acre** (0.14 pound active ingredient per acre)

Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix Tacoma Ag Imidacloprid 4.0 with other insecticides for knockdown of pests or for improved control of other pests.

SUGAR BEET* - soil treatment

(for use only in CA)

Pests Controlled

Rate
FI Oz/A

Aphids	3.0 to 6.0
Flea beetles	
Leafhoppers	
Whiteflies	

Pests/Diseases Suppressed

Symptoms of:

Western yellows/Beet curly top hybrigeminivirus (BCTV)	3.0 to 6.0
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Restrictions

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **6.0 fluid ounces per acre** (0.18 pound active ingredient per acre)

Maximum imidacloprid allowed per year: **0.18 pound active ingredient per acre** (from any formulation) on any row spacing. Do not apply immediately prior to bud opening or during bloom or when bees are foraging.

Instructions

Apply specified dosage of this product in the following method:

1. Apply specified dosage in sufficient carrier volume to insure uniform application. Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting.

The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.

*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

Tacoma Ag Imidacloprid 4.0 Conversion Chart for Linear Application

RATE:		Rate: FI Oz/1000 row-ft							
		Based on average row spacing (in inches)							
FI Oz/A		10	15	20	25	30	35	40	45
5		0.10	0.14	0.19	0.24	0.29	0.33	0.38	0.43
6		0.11	0.17	0.23	0.29	0.34	0.40	0.46	0.51
7		0.13	0.20	0.27	0.33	0.40	0.47	0.53	0.60
8		0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.68
9		0.17	0.26	0.34	0.43	0.51	0.60	0.68	0.77
10		0.19	0.29	0.38	0.48	0.57	0.67	0.76	0.86
12		0.23	0.34	0.46	0.57	0.69	0.80	0.92	1.03
14		0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21
16		0.31	0.46	0.61	0.77	0.92	1.07	1.22	1.38

TREE, BUSH and VINE CROPS

Application Directions

BANANA and PLANTAIN - soil treatment

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 16.0
Leafhoppers	
Pests/Diseases Suppressed	
Scales	8.0 to 16.0

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

BANANA and PLANTAIN – foliar treatment

Pests Controlled	Rate Fl Oz/A
Aphids	3.2
Leafhoppers	
Thrips	

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Minimum interval between applications: **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

Apply specified dosage as a broadcast or directed spray to infested area ensuring thorough coverage. This product may be applied through properly calibrated ground or aerial application equipment. Aerial applications of this product may result in slower activity and reduced control relative to results from ground application.

BUSHBERRY - soil treatment**Including:** Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Ligonberry, Salal**Pests Controlled****Rate
Fl Oz/A**

Japanese beetle (adults, feeding on foliage)	8.0 to 16.0
White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	

RestrictionsPre-Harvest Interval (PHI): **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)**Instructions**

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. 18-inch band on each side of the row followed with 0.25 inches of irrigation immediately after application.

For optimal grub control, apply Tacoma Ag Imidacloprid 4.0 to control 1st or 2nd instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st. For optimum control of Japanese beetle larvae, make applications from June 1 to July 15. Do not apply pre-bloom or during bloom or when bees are foraging.

Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root-zone will help protect berry plant roots from grub feeding.

Apply this product to moist soil. If necessary, apply one hour of irrigation water immediately before application of Tacoma Ag Imidacloprid 4.0. To facilitate movement of this product into the soil and root-zone, 1/2 to 1 inch of irrigation water or rainfall must be applied or received within 24 hours of application.

BUSHBERRY – foliar treatment**Including:** Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, and Salal**Pests Controlled****Rate
Fl Oz/A**

Aphids	1.2 to 1.6
Leafhoppers / Sharpshooters	
Blueberry maggot	2.4 to 3.2
Japanese beetle (adults), Thrips (foliage-feeding thrips only)	

RestrictionsPre-Harvest Interval (PHI): **3 days**Minimum interval between applications: **7 days**Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **5**

Minimum application volume (water): 20.0 GPA – ground, 5.0 GPA – aerial.

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

CANEBERRY - soil treatment

Including: Blackberry (*Rubus eubatus*, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these), Raspberry (black and red, *Rubus occidentalis*, *Rubus strigosus*, *Rubus idaeus*)

Pests Controlled	Rate
	Fl Oz/A
Aphids	8.0 to 16.0
Leafhoppers	
Whiteflies	
Rednecked cane borer	12.0 to 16.0
Pest Suppressed	
Thrips (foliage feeding thrips only)	8.0 to 16.0

Restrictions:

Pre-Harvest Interval (PHI): **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications:

Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. Basal, soil drench in a minimum of 500 gallons solution per acre.

CITRUS (Containerized) – Soil Treatment

Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor). Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

Pests Controlled	Rate
	mL/ft ³ Container Media
Aphids	0.375
Asian citrus psyllid	
Black fly	
Citrus leafminer	
Leafhoppers / Sharpshooters	
Mealybugs	
Scales	
Whiteflies	
Citrus root weevil (larval complex)	0.625 to 1.25
Pests/Diseases Suppressed	
Citrus thrips (foliage feeding thrips only)	1.25

Instructions

Determine volume of container and calculate dosage necessary to treat container. Apply calculated dosage of this product per container as a soil drench or through low-pressure drip or trickle irrigation water. Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results, treatment should be made at planting prior to insect infestation. Retreat if necessary. For control of larvae of the citrus root weevil complex, application should be made prior to neonate larvae entering potting media. Utilize higher listed dosage for heavy infestations.

CITRUS (Field) - soil treatment

Including: Calamondin, Citrus, Citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

Pests Controlled	Rate Fl Oz/A
Aphids	8.0 to 16.0
Asian citrus psyllid	
Black fly	
Citrus leafminer	
Leafhoppers / Sharpshooters	
Mealybugs	
Scales	
Termites (FL only)	
Whiteflies	

Pests/Diseases Suppressed

Citrus nematode	16.0
Symptoms of:	
Citrus tristeza virus CTV through vector control	
Citrus yellows	
Thrips (foliage feeding thrips only)	

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. To break soil surface tension, lightly pre-wet soil prior to applications of Tacoma Ag Imidacloprid 4.0. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move this product into root-zone. Allow 24 hours before initiating subsequent irrigations;
2. Soil surface band spray on both sides of the tree. Overlap bands at the base of the tree to create a continuous band within the drip-line area of the tree, to be followed immediately with light sprinkler irrigation sufficient to move the product into the upper portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less;
3. Drench to base of tree not exceeding 1.0 quart total solution/tree immediately around trunk of tree and extending outward covering the entire fibrous root system of the tree. Only suitable for trees up to 8 feet tall;
4. For control of existing termite infestations, apply specified dosage in 1.0 to 4.0 quarts of total solution volume, depending on size of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk.
5. For suppression of citrus nematode, apply specified dosage through low-pressure chemigation or soil surface band spray only, ensuring complete coverage of the root system and utilizing application directions stated above for the respective application method. Repeated and regular use of this product over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

CITRUS (Field) – foliar treatment

Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, Tangelo, and other cultivars and/or hybrids of these.

Pests Controlled	Rate Fl Oz/A
Aphids	4.0 to 8.0
Asian citrus psyllid	(depending on tree size, target pest,
Blackfly	and infestation pressure)
Leafhoppers / Sharpshooters	
Leafminers	
Mealybugs	
Scales	
Whiteflies	

Pests Suppressed

Rate
FI Oz/A

Thrips (foliage-feeding thrips only)

4.0 to 8.0

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

Application

Scales – time applications to the crawler stage. Treat each generation.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

COFFEE - soil treatment**Pests Controlled**

Rate
FI Oz/A

Aphids

8.0 to 16.0

Leafhoppers

Leafminer

Pests/Diseases Suppressed

Scales

8.0 to 16.0

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
3. Basal, soil drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

COFFEE – foliar treatment**Pests Controlled**

Rate
FI Oz/A

Aphids

3.2

Leafhoppers

Whiteflies

Pests Suppressed

Rate
FI Oz/A

Scales

3.2

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified dosage as a broadcast or directed spray to infested area insuring thorough coverage. Apply this product through properly calibrated ground or aerial application equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control.

Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

CRANBERRY - soil treatment

Pests Controlled	Rate FI Oz/A
Rootgrubs (<i>Scarabaeidae</i>)	8.0 to 16.0
Rootworms (<i>Chrysomelidae</i>)	

Restrictions

Pre-Harvest Interval (PHI): **30 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply this product to moist soil. Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. As a soil spray (ground application) directed to the root and crown area using a minimum of 20.0 gallons of water per acre;
2. As a chemigation application with 600 to 1000 gallons water.

Immediately upon application, this product must be incorporated into root-zone by 0.1 to 0.3 inch water per acre, either with the chemigation application or through irrigation/rainfall if not applied through chemigation. Inadequate incorporation within 24 hours of application may result in reduced control.

Rootgrubs and Rootworms

Best control may be achieved when application is made post-bloom immediately after bees are removed. Applications should target early instar larvae.

This product has not been tested for crop response in tank mixes with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of this product and the desired fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate crop response within 48 hours and for at least two weeks prior to utilizing the tank mix on larger acreage. If crop injury results from the premix test, do not apply the tank mix to larger acreage.

GRAPE - soil treatment

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate FI Oz/A
European fruit lecanium	8.0 to 16.0
Leafhoppers/Sharpshooters	
Mealybugs	
<i>Phylloxera</i> * spp.	

Pests/Diseases Suppressed

Grapeleaf skeletonizer	12.0 to 16.0
Nematodes	
Pierce's disease	

Restrictions

Pre-Harvest Interval (PHI): **30 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Instructions

Apply specified dosage of this product in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.
4. For suppression of nematodes, apply 16.0 fluid ounces in a single application or two 8.0 fluid ounces applications on a 30- to 45-day interval. Apply only by 1) chemigation into root-zone through above ground low-pressure drip, trickle, micro-sprinkler, or equivalent equipment; or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root-zone of the plant. Repeated and regular use of Tacoma Ag Imidacloprid 4.0 over several consecutive growing seasons provides the greatest

degree of nematode suppression and yields the greatest plant response. For optimal results, make application(s) between bud-break and the pea-berry stage. A total of 16.0 fluid ounces per acre is recommended under any of the following conditions:

- Where vigorous vine growth is expected;
- In warmer growing areas;
- Where mealybug and European fruit lecanium populations are expected to be heavy;
- Where vine populations exceed 600 per acre, or;
- For suppression of nematodes.

*Repeated and regular use of this product over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

GRAPE – foliar treatment

Including: American bunch grape, Muscadine grape, and Vinifera grape

Pests Controlled	Rate Fl Oz/A
Leafhoppers / Sharpshooters	1.2 to 1.6
Mealybugs	
Grape skeletonizer	1.5 to 1.6

Restrictions

Pre-Harvest Interval (PHI): **0 days**

Minimum interval between applications: **14 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **3.2 fluid ounces per acre** (0.1 pound active ingredient per acre)

Apply Tacoma Ag Imidacloprid 4.0 by ground application only.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

HOP - soil treatment

Pests Controlled	Rate Fl Oz/A
Aphids	9.6

Restrictions

Pre-Harvest Interval (PHI): **60 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre)

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in one of the following methods:

1. Chemigation into root-zone through low-pressure drop, trickle, micro-sprinkler or equivalent equipment;
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.
4. Use the higher listed dosage where extended residual control is desired or for treating larger vines with dense foliage volume.

HOP – foliar treatment

Pests Controlled	Rate Fl Oz/A
Aphids	3.2

Restrictions

Pre-Harvest Interval (PHI): **28 days**

Minimum interval between applications: **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre).

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to

improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Tacoma Ag Imidacloprid 4.0 may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

POME FRUIT - soil treatment

Including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled

Rate
FI Oz/A

Aphids (including woolly apple aphid)

8.0 to 12.0

Leafhoppers

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

POME FRUIT – foliar treatment

Including: Apples, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled

Rate
FI Oz/A

Leafhoppers

1.6 to 3.2

Aphids (except woolly apple aphid)

3.2

Apple maggot

Leafminers

San Jose scale

FOR PEAR ONLY:

Mealybugs

8.0

Pear psylla

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre).

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Combine applications targeting apple maggots with an approved sticker at the manufacturer's specified rates.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

POMEGRANATE - soil treatment

Pests Controlled

Rate
FI Oz/A

Aphids

8.0 to 16.0

Leafhoppers / Sharpshooters

Whiteflies

Restrictions

Pre-Harvest Interval (PHI): **0 day**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

POMEGRANATE - foliar treatment

Pests Controlled	Rate FI Oz/A
Aphids	3.2
Leafhoppers / Sharpshooters	
Whiteflies	
Pests Suppressed	Rate FI Oz/A
Scales	3.2

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre).

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

STONE FRUIT - soil treatment

Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

In-field, Soil Application

Pests Controlled	Rate FI Oz/A
Aphids (including woolly apple aphid)	8.0 to 12.0
Leafhoppers	

Restrictions

Pre-Harvest Interval (PHI): **21 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **12.0 fluid ounces per acre** (0.38 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of Tacoma Ag Imidacloprid 4.0 in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Pre-plant, Root Dip Application

Pests Controlled	Rate FI Oz/10.0 Gal Root-Dip Solution
Black peach aphid (infesting roots)	1.0

Mix this product at **1.0** fluid ounce per 10.0 gallons of water. Thoroughly wet bare-root transplant to slightly above the graft union by soaking roots in the Tacoma Ag Imidacloprid 4.0 solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment.

STONE FRUIT – foliar treatment

Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

Pests Controlled	Rate Fl Oz/A
Aphids	1.6 to 3.2
Green June beetle	
Japanese beetle	
Leafhoppers / Sharpshooters	
Plant bugs	
Rose chafer	
San Jose scale	
Cherry fruit fly	2.4 to 3.2

Pests Suppressed	Rate Fl Oz/A
Plum curculio	3.2
Stink bugs	

Restrictions for Apricot, Nectarine, Peach:

Pre-Harvest Interval (PHI): **0 days**

Minimum interval between applications: **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **9.6 fluid ounces per acre** (0.3 pound active ingredient per acre).

Minimum application volume (water): 50.0 GPA – ground application, 25.0 GPA – aerial application.

Do not apply pre-bloom or during bloom or when bees are foraging.

Restrictions for Cherries, Plums, Plumcot, Prune:

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre).

Minimum application volume (water): 50.0 GPA – ground application, 25.0 GPA – aerial application.

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control.

Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

TROPICAL FRUIT - soil treatment

Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Guava, Jaboticaba, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursap, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled	Rate Fl Oz/A
Aphids	12.0 to 16.0
Avocado lacebug	
Leafhoppers	
Whiteflies	
Pests/Diseases Suppressed	
Scales	16.0
Thrips (foliage-feeding thrips only)	

Restrictions

Pre-Harvest Interval (PHI): **6 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage of this product in the following method:

1. Chemigation through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

TROPICAL FRUIT - foliar treatment

Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Chermoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled

Rate FI Oz/A

Aphids

3.2

Leafhoppers / Sharpshooters

Mealybugs

Thrips (foliage-feeding thrips only)

Whiteflies

Pests Suppressed

Rate
FI Oz/A

Scales

3.2

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **10 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **16.0 fluid ounces per acre** (0.5 pound active ingredient per acre).

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

TREE NUTS (except Almond) - Soil Treatment

Including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled

Rate
FI Oz/A

Aphids

8.0 to 16.0

Leafhoppers/Sharpshooters

Mealybugs

Spittlebugs

Termites

Whiteflies

Pests/Diseases Suppressed

Pecan scab (from reduction in honeydew deposition)

8.0 to 16.0

Thrips (foliage-feeding thrips only)

16.0

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making soil applications: **16.0 fluid ounces per acre** (0.50 pound active ingredient per acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Instructions

Apply specified dosage prior to or at onset of pest infestation in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
Pre-wet soil prior to applications of this product and allow soil to dry following application and prior to subsequent irrigation;
2. Emitter or spot application in a minimum of 4.0 fluid ounces of mixture/emitter site;
3. Shank or subsurface side-dress, injected to a depth just above or just within the root zone and between the trunk and drip line of the tree canopy. Product should be applied in a minimum of 10.0 gallons per acre using multiple

- shanks on both sides of trees. Ensure product placement is below sod or orchard floor debris. Irrigation covering entire treated area should follow within 48 hours to promote uptake by root system.
4. For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Utilize sufficient carrier volume to penetrate the soil to a depth of 18 to 24 inches to obtain optimum control. Allow soil to dry following treatment and prior to applying any irrigation.

Use the higher listed rates when applied by shank or subsurface side-dress, used on larger trees, soils are high in clay content, high plant populations exist, and/or where extended control is desired. Under some conditions, control may not occur for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.

TREE NUTS (except Almond) - Foliar Treatment

Including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled

Rate Fl Oz/A

Aphids (except black pecan aphid)	1.5 to 3.0
Leafhoppers/Sharpshooters	
<i>Phylloxera</i> spp. (leaf infestations)	
Spittlebugs	
Whiteflies	
Black pecan aphid	3.0
Mealybugs	
San Jose scale	

Restrictions

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **6 days**

Maximum Tacoma Ag Imidacloprid 4.0 allowed per year when making foliar applications: **10.4 fluid ounces per acre** (0.36 pound active ingredient per acre)

Minimum application volume (water); 50.0 GPA – ground application, 25.0 GPA – aerial application.

Do not apply within 10 days prior to bloom or during bloom or when bees are foraging.

Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant such as LI 700 to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout field and re-treat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests. Aerial applications of this product may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size mature trees or vines.

Applications:

Applications for control of San Jose scale should be timed according to crawler stage, treating each successive generation.

Two applications on a 10- to 14-day interval may be required to achieve control.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: [Nonrefillable Container (five gallons or less):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Nonrefillable Container (greater than five gallons):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Tacoma Ag, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, TACOMA AG, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Unintended consequences may result because of such factors as use of the product contrary to label instructions, presence of other materials, or other factors, all of which are beyond the control of Tacoma Ag, LLC or the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Tacoma Ag, LLC election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or

(2) Replacement of amount of product used.

To the extent consistent with applicable law, Tacoma Ag, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Tacoma Ag, LLC is promptly notified of such loss or damage in writing. In no case, to the extent consistent with applicable law, shall Tacoma Ag, LLC be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Tacoma Ag, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

Actara, Centric and Platinum are registered trademarks of a Syngenta Group Company.

Admire, Calypso, Gaucho, Leverage, Provado and Trimax are registered trademarks of Bayer.

Assail and Intruder are registered trademarks of Nippon Soda Company, LTD.

Bidrin is a registered trademark of Amvac Chemical Corporation.

LI 700 is a registered trademark of Loveland Products, Inc.

[EPA approval date]



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MIKE@PYXISRC.COM

August 22, 2016

MRID 499921-00

ELECTRONIC SUBMISSION

Venus Eagle (PM 1)
Document Processing Desk (**REGFEE**)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202-4501

RE: Tacoma Ag, LLC – Tacoma Ag Imidacloprid 4.0 (EPA Reg. No. 83520-)
Application for New Pesticide Registration

Dear Ms. Eagle,

On behalf of Tacoma Ag, LLC please find the enclosed application for registration of Tacoma Ag Imidacloprid 4.0, an end-use product containing imidacloprid as the active ingredient. In support of this application, we submit the following documents:

1. Application for Registration (EPA Form 8570-1)
2. Receipt of PRIA pre-payment from pay.gov
3. Confidential Statement of Formula (Basic Formulation dated August 16, 2016)
4. Formulators Exemption Statement (EPA Form 8570-27)
5. One (1) copy of the proposed labeling
6. Certification with Respect to Citation of Data (EPA Form 8570-34)
7. Agency Internal Use Copy of the Data Matrix (EPA Form 8570-35)
8. Public File Copy of the Data Matrix (EPA Form 8570-35)
9. Letter of Authorization
10. Product Specific Data:

MRID	Guideline	Report Title
49992101	830.1550, 830.1600, 830.1650, 830.1670, 830.1700, 830.1750, 830.1800	Leapard, B. Tacoma Ag Imidacloprid 4.0 Product Chemistry Volume II. Product Identity and Composition, Description of Materials Used to Produce the Product, Description of the Formulation, Process, Discussion of Formation of Impurities, Preliminary Analysis, Certified Limits and Enforcement Analytical Methods.
49992102	830.6302, 830.6303, 830.6304, 830.6314, 830.7000, 830.7100, 830.7300	Theus, S. Final Report for: Physical and Chemical Characteristics of Imidacloprid 4SC (amended).
49992103	830.6313, 830.6315, 830.6316, 830.6317,	Kellogg, M. Waiver Request for Certain Data Requirements for Tacoma Ag Imidacloprid 4.0.

DOCUMENTUM

MRID	Guideline	Report Title
	830.6319, 830.6320, 830.6321, 830.7050, 830.7200, 830.7220, 830.7370, 830.7520, 830.7550-830.7570, 830.7840-830.7860, 830.7950	

Tacoma Ag, LLC believes its product, Tacoma Ag Imidacloprid 4.0, is substantially similar to a currently registered product (EPA Reg. No. 34704-931).

Tacoma Ag, LLC believes this application falls under Category R300 (44) since Tacoma Ag Imidacloprid 4.0 is a new product, substantially similar in composition and use to a registered product, only product chemistry data are being submitted to support the application for registration and the cite-all method is being used to support product specific acute toxicity data requirements. In addition, the technical source of active ingredient is based on a registered source of supply and therefore, Tacoma Ag Imidacloprid 4.0 qualifies for Formulators Exemption for imidacloprid generic data requirements.

We trust you will find this application complete and in compliance with the requirements for registration under FIFRA. Please feel free to call me if you have any questions or need any additional information.

Sincerely,



Michael Kellogg

Enclosures

cc: W. Lohman; Tacoma Ag, LLC

Jai

- ① Please check that all doc. are printed out from documentum.
- ② Ensure technical allows all uses on this label
- ③ Been go to the
- ④ Deal w/ Mike Kellogg getting label in shape.

United States



Environmental Protection Agency

Washington, DC 20460

- ☒ Registration
☐ Amendment
☐ Other

OPP Identifier Number

Application for Pesticide – Section I

1. Company/Product Number Tacoma Ag, LLC	2. EPA Product Manager V. Eagle	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Tacoma Ag, LLC / Tacoma Ag Imidacloprid 4.0	PM# 1	
5. Name and Address of Applicant (include ZIP Code) Tacoma Ag, LLC c/o Pyxis Regulatory Consulting Inc. 4110 136 th St. Ct. NW Gig Harbor, WA 98332	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. 34704-931 Product Name Wrangler Insecticide	

Section - II

- ☐ Amendment – Explain below. ☐ Final printed labels in response to Agency letter dated _____
- ☐ Resubmission in response to Agency letter dated _____ ☒ "Me Too" Application.
- ☐ Notification – Explain below. ☐ Other – Explain below.

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

This application falls under Category R300 (44) as it is a new product substantially similar in composition and use to a registered product, only product chemistry data are being submitted and the cite-all method of data support is being used to support product specific acute toxicity data requirements. The fee due is \$1582.00 and the decision timeline is 4 months. A receipt of PRIA pre-payment from pay.gov is included with this application. Should you have any questions, please contact me at (email) Mike@PyxisRC.com or (phone) 253-853-7369.

Section - III

1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Unit Packaging wgt. _____	No. per container _____	If "Yes" Package wgt. _____	No. per container _____
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 1, 2.5, 265 gallons		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled					

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Michael Kellogg	Title Agent	Telephone No. (Include Area Code) (253) 853-7369
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Agent	
4. Typed Name Michael Kellogg	5. Date Aug. 22, 2016	

21-Day Screen Completed by
Contractor

21-Day Expires on 9-12-16

Jacket # 83520-UG

MRID# 499921

Content Screen: Recommend to Pass/Fail

11-3 Review: Pass/Fail/NA

Overall Status: Recommend to Pass/Fail

Transfer This Jacket to:

STEPHEN SCHABLE

NEW APPLICATIONS

DATE: AUG 22 2016

FILE REG NUMBER: 83520-VG

FEP (OPPIN ENTRY): BD AUG 22 2016

(Initial & Date)

FILE ROOM: _____

(Initial & Date)

SIG: _____

(Initial & Date)

FILE ROOM: _____

(Initial & Date)

ASSIGN TO PM: AD _____ RD _____ BPPD _____

_____ JACKET TO SHELF (DATA)

PRIA 3 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

September 2012

21 Day Screen Start Date: 8-22-16

Experts In-Processing Signature: B.B.

Date 8-30-16

Fee Paid: Yes ☒

Division management contacted on issues No ☐ Yes ☐ Date _____

EPA Reg. Number: <u>83520-UG</u>		EPA Receipt Date: <u>8-22-16</u>				
Items for Review				Yes	No	N/A*
1	Application Form (EPA Form 8570-1) signed & complete including package type			X		
2	Confidential Statement of Formula all boxes completed, form signed, and dated (EPA Form 8570-4)			X		
	a) All <u>inerts</u> , including fragrances, approved for the proposed uses (see Footnote A)	yes	no			
		X				
3	Certification with Respect to Citation of Data (EPA Form 8570-34) completed and signed (N/A if 100% repack)			X		
	Certificate and data matrix consistent			X		
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)	yes	no			
		X				
	If applicable, is there a letter of Authorization for exclusive use only.					
4	Formulator's Exemption Statement (EPA Form 8570-27) completed and signed (N/A if source is unregistered or applicant owns the technical)			X		
	Data Matrix (EPA Form 8570-35) both internal and external copies (PR 98-5) completed and signed (N/A if 100% repack)			X		
5	a) Selective Method (Fee category experts use)	yes	no			
		X				
	b) Cite-All (Fee category experts use)					
	c) Applicant owns all data (Fee category experts use)					
6	5 Copies of <u>Label</u> (Electronic labels on CD are encouraged and guidance is available)			X		
7	Is the data package consistent with <u>PR Notice 86-5</u>			X		
8	Notice of Filing included with petitions					X

9	If applicable for conventional applications, <u>reduced risk rationale</u>			
10	<u>Required Data</u> and/or data waivers. See Footnote C.			
	a) List study (or studies) not included with application			
<p>Comments:</p> <p>Documentation: Pass or Fail - All Required Forms Complete</p> <p>Inerts: Pass or Fail - Inerts Approved for Pre-Harvest Food Use</p> <p>PRN 11-03: Pass or Fail - MRID: 499921</p> <p>9/1/16</p> <p>Overall Status: Pass or Fail</p>				

* N/A – Not Applicable

Footnotes

A. During the 21 day initial content review, all CSFs will be reviewed to determine whether all inerts listed, including fragrances, are approved for the proposed uses or have an application pending with the Agency. If an unapproved inert with no application pending with the Agency is identified, the applicant must either 1) resolve the inert issue by, for example, removing the inert, substituting it with an approved inert, submitting documentation that EPA approved the inert for the proposed pesticidal uses, correcting mistakes on the CSF, etc. or 2) provide the data to support OPP approval of the inert or 3) withdraw the application. Removing or substituting an inert ingredient will require a new CSF and may require submission of data. All information, forms, data and documentation resolving the inert issue must have been received by the Agency or the application withdrawn within the 21 day period, otherwise, the Agency will reject the application as described below.

To successfully complete this aspect of the 21 day initial content screen, applicants are **strongly encouraged** to verify that all inert ingredients have been approved for the application's uses or have an application pending with the Agency **even if a product is currently registered** by consulting the inert Web site and if the inert is not approved nor has an application pending with the Agency, to **obtain the necessary inert approval prior to submitting an application to register a pesticide product containing that inert ingredient**. Some inert ingredients are no longer approved for food uses or certain types of uses. The name and/or CAS number on a CSF must match the name and CAS number on this web site. Simple typographical errors in the name or CAS number have resulted in processing delays.

If an inert is not listed on the inert ingredient web site and the applicant believes that the inert has been approved, the applicant should contact the Inert Ingredient Assessment Branch (IIAB) at inertsbranch@epa.gov and resolve the issue. Copies of the correspondence with IIAB resolving the issue should accompany the application. All new inerts except PIP inerts are reviewed by IIAB. The IIAB should also be contacted for any questions on what supporting data needs to be submitted for and the Agency's inert review process. Questions on PIP inerts should be directed to the Chief of Microbial Pesticides Branch.

When a brand, trade, or proprietary name of an inert ingredient is listed on a CSF, additional information such as an alternate name of the inert, CAS number or other information must also be included to enable the Agency to determine if it has been approved. Each component of an inert mixture (including a fragrance) must be identified. In some cases, the supplier of the mixture or fragrance may need to provide this information to the Agency. Prior to the Agency's receipt of an application, applicants must arrange with a proprietary mixture or fragrance supplier to provide the component information to the Agency or promptly upon EPA's request. If the inert ingredients in a proprietary blend (including fragrances) cannot or are not identified or provided within the 21-day content review period, the Agency will reject the application.

During the 21 day content review, applicants should submit information to the individual identified by the Agency when the applicant is informed of an unapproved inert.

Unapproved Inerts Identified on CSFs

All applications except conventional new products and PIPs

Once an unapproved inert is identified on a CSF, the Agency will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Provide the required information necessary to identify an inert approval application that is pending with the Agency; or
3. Submit the information and data needed for the Agency to approve the unapproved inert. If this option is selected and implemented, the Agency may request an extension in the PRIA decision review timeframe to accommodate the inert review/approval process;
4. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of these options is selected and implemented by the applicant within the 21 day content review period, the Agency will reject the application and retain 25% of the full fee of the category identified.

Conventional New Product Applications

When the Registration Division identifies an unapproved inert on a CSF with an application for a new product that the applicant has not identified as requiring an inert approval (R300 or R301), it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Submit the information and data needed for the Agency to approve the unapproved inert, including any required petition to establish or amend a tolerance or exemption from a tolerance. (This option may change the PRIA category for the application, which could require a longer decision review time and a larger fee. If additional fees are due, they must be received by the Agency within the 21 day content review period.)

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21-day content-review period, the Agency will reject the application and retain 25% of the appropriate fee for the new product-inert approval category.

PIP Applications

When the Biopesticide and Pollution Prevention Division identifies an unapproved inert on a PIP CSF and a request to approve the inert does not accompany the application, it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the spelling or name of the inert to that in 40 CFR 174, or providing documentation that the inert has been approved; or
2. Submit the information and data needed for the Agency to approve the unapproved inert. If an inert ingredient tolerance exemption petition is required, the petition must be received by the Agency and the B903 fee paid within the 21 day period. If this option is selected and implemented, the Agency will discuss harmonizing the timeframe for both actions.
3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21 day content review period, the Agency will reject the application and retain 25% of the fee.

B. A policy on documentation of offers to pay is still being developed, however, for a me-too or fast track (similar/identical) new product, R300 or A530, an application without the necessary authorizations of offers to pay will be placed into either R301 or A531. The Agency recommends that authorizations of offers to pay be submitted with other PRIA applications to avoid delays in the Agency's decision.

C. Biopesticide applicants are advised to contact the Agency and discuss study waivers prior to submitting their application to the Agency. Documentation of such discussions should be submitted with the study waiver.

R 300 and 301

100% identical (repack): YES or NO (circle one)

{If **yes**, it's a 100% repack - then product chemistry, acute toxicity and efficacy data are not required}

Data on Group A and B must be submitted - Group A and B can not be cited.

Guideline No.	Group A: Product Chemistry Data Study Title	Data submitted	
		Yes	No
830.1550	Product Identity & Composition	X	
830.1600	Description of materials used to produce the product	X	
830.1650	Description of formulation process	X	
830.1670	Discussion on the formation of impurities	X	
830.1700	Preliminary analysis	X	
830.1750	Certified limits (158.345)	X	
830.1800	Enforcement analytical method	X	

Guideline No.	Group B: Product Chemistry Data Study Title	Data submitted	
		Yes	No
830.6302	Color	X	
830.6303	Physical State	X	
830.6304	Odor	X	
830.6314	Oxidation/Reduction (Chemical incompatibility)	X	
830.6315	Flammability	X	
830.6316	Explosibility	X	
830.6317	Storage stability	X	
830.6319	Miscibility	X	
830.6320	Corrosion Characteristics	X	
830.6321	Dielectric Breakdown voltage	X	
830.7000	pH	X	
830.7100	Viscosity	X	
830.7300	Density	X	

R 300 and 301

New products must provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

Guideline No.	Acute toxicity (6 pack) Study Title	Cited	
		Yes	No
870.1100	Acute Oral (LD50)	X	
870.1200	Acute Dermal (LD50)	X	
870.1300	Acute Inhalation (LC50)	X	
870.2400	Acute Eye Irritation	X	
870.2500	Acute Dermal Irritation	X	
870.2600	Dermal Sensitization	X	

Efficacy – which guideline depends on the proposed label use and they must cite the data to be used for the bridging rationale.

Guideline No.	Efficacy Study Titles	Cited		Comments
		Yes	No	
810.3100	Soil Treatments for Imported Fire Ants			N/A
810.3200	Livestock, Poultry, Fur and Wool-Bearing Animal Treatments			N/A
810.3300	Treatments to Control Pests of Humans and Pets			N/A
810.3400	Mosquito, Black Fly, and Biting Midge (Sand Fly) Treatments			N/A
810.3500	Premises Treatments			N/A
810.3600	Structural Treatments			N/A
810.3800	Methods for Efficacy Testing of Termite Baits			N/A



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

August 26, 2016

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OPP Decision Number: D-520714
EPA File Symbol or Registration Number: 83520-UG
Product Name: Tacoma Ag Imidacloprid 4.0
EPA Receipt Date: 22-Aug-2016
EPA Company Number: 83520
Company Name: TACOMA AG, LLC

MICHAEL KELLOGG
PYXIS REGULATORY CONSULTING, INC.
AGENT FOR TACOMA AG, LLC
4110 136TH ST, CT NW
GIG HARBOR, WA 98332-

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application and certification of payment. If you submitted data with this application, the results of the PRN-2011-3 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R300
NEW PRODUCT;OR SIMILAR COMBINATION PRODUCT (ALREADY REGISTERED) TO AN IDENTICAL OR SUBSTANTIALLY SIMILAR IN COMPOSITION AND USE TO A REGISTERED PRODUCT;REGISTERED SOURCE OF ACTIVE INGREDIENT;NO DATA REVIEW ON ACUTE TOXICITY, EFFICACY OR CRP - ONLY PRODUCT CHEMISTRY DATA;CITE-ALL DATA CITATION, OR SELECTIVE DATA CITATION WHERE APPLICANT OWNS ALL REQUIRED DATA, OR APPLICANT SUBMITS SPECIFIC AUTHORIZATION LETTER FROM DATA OWNER;CATEGORY ALSO INCLUDES 100% RE-PACKAGE OF REGISTERED END-USE OR MANUFACTURING-USE PRODUCT THAT REQUIRES NO DATA SUBMISSION NOR DATA MATRIX;

No additional payment is due at this time. If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-9362.

Sincerely,

A handwritten signature in black ink, appearing to be "M. Kellogg".

Front End Processing Staff
Information Technology & Resources Management Division

7

Fee for Service

{990910Æ~

This package includes the following

- ☒ New Registration
- ☐ Amendment

☒ Studies? ☐ Fee Waiver?
☐ volpay % Reduction: ____

for Division

- ☐ AD
- ☐ BPPD
- ☒ RD

Risk Mgr. 1

Receipt No.

S-

990910

EPA File Symbol/Reg. No.

83520-UG

Pin-Punch Date:

8/22/2016

☐ This item is NOT subject to FFS action.

Action Code:

Requested:

R300

Granted:

R300

Amount Due: \$ 1,582

Parent/Child Decisions:

☐ Inert Cleared for Intended Use

☐

Uncleared Inert in Product

Reviewer:

Dee Colby

Date:

2016 Aug. 24

Remarks:

Coded in
DOCUMENTUM

Send to Sim Clinic

Receipt for Section 3

S: 990910

Milestone Email: Mike@PyxisRC.com

Regulatory Type: Product Registration - Section 3

Resubmission: ☐ Yes ☒ No

Print Letter

Application Type: New Registration

Fee For Service: ☒ Yes ☐ No

Enter More Information

Billable: ☒ Yes ☐ No

Tracking

Company: 83520 TACOMAAG, LLC



Risk Manager: Registration Division, Risk Management Team 1

Product #: 83520-UG

Product Name: Tacoma Ag Imidacloprid 4.0

Overide#

Me Too
Section3: 34704-931

Me Too Product
Name: WRANGLER INSECTICIDE



Application Date: 22-Aug-2016



OPP Rec'd Date: 22-Aug-2016



Front End Date: 23-Aug-2016



Risk Manager Send Date:



FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Fast Track: ☐

New Ingredient: ☐

Receipt Description:

Portal submission pkg# 13554 New EUP registration

Receipt Content

Study

CSF

View/Edit

New Ingredient
Request Date

New Ingredient
Received Date

Form A: Signature Date

Form B: Signature Date



Receipt

Your payment is complete

Pay.gov Tracking ID: 25TD59FS

Agency Tracking ID: 75075098499

Form Name: Pesticide Registration Improvement Act - Prepayment

Application Name: PRIA Service Fees

Payment Information

Payment Type: Debit or credit card

Payment Amount: \$1,582.00

Transaction Date: 08/18/2016 12:23:52 PM EDT

Payment Date: 08/18/2016

Registration Number: 83520-xx

Company Name: Tacoma Ag, LLC

Company Number: 83520

Action Code: R300

Account Information

Cardholder Name: Bryan Wilson

Card Type: Master Card

Card Number: *****6904

Email Confirmation Receipt

Confirmation Receipts have been emailed to:

mike@pyxisrc.com

DOCUMENTUM

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WASHINGTON, D.C. 20460

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DATA MATRIX

Date August 22, 2016	EPA Reg. No./File Symbol 83520-XX	Page 1 of 12
Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709		Product Tacoma Ag Imidacloprid 4.0

Ingredient **Imidacloprid**

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	Product Identity and Composition	49992101	Tacoma Ag, LLC	OWN	
830.1600	Description of Materials Used to Produce the Product	49992101	Tacoma Ag, LLC	OWN	
830.1620	Description of Production Process				Not required ¹
830.1650	Description of Formulation Process	49992101	Tacoma Ag, LLC	OWN	
830.1670	Discussion of Formation of Impurities	49992101	Tacoma Ag, LLC	OWN	
830.1700	Preliminary Analysis				Not required ²
830.1750	Certified Limits	49992101	Tacoma Ag, LLC	OWN	
830.1800	Enforcement Analytical Method	49992101	Tacoma Ag, LLC	OWN	
830.6302	Color	49992102	Tacoma Ag, LLC	OWN	
830.6303	Physical State	49992102	Tacoma Ag, LLC	OWN	
830.6304	Odor	49992102	Tacoma Ag, LLC	OWN	
830.6313	Stability to Normal and Elevated Temperatures, Metals, and Metal Ions	49992103	Tacoma Ag, LLC	OWN	Not required ³
830.6314	Oxidation/Reduction: Chemical Incompatibility	49992102	Tacoma Ag, LLC	OWN	

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709	Product Tacoma Ag Imidacloprid 4.0	

Ingredient **Imidacloprid**

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6315	Flammability	49992103	Tacoma Ag, LLC	OWN	Not required ⁴
830.6316	Explosibility	49992103	Tacoma Ag, LLC	OWN	Not required ⁵
830.6317	Storage Stability	49992103	Tacoma Ag, LLC	OWN	PRN 92-5 ⁶
830.6319	Miscibility	49992103	Tacoma Ag, LLC	OWN	Not required ⁷
830.6320	Corrosion Characteristics	49992103	Tacoma Ag, LLC	OWN	See endnote ⁶
830.6321	Dielectric Breakdown Voltage	49992103	Tacoma Ag, LLC	OWN	Not required ⁸
830.7000	pH	49992102	Tacoma Ag, LLC	OWN	
830.7050	UV/Visible Absorption	49992103	Tacoma Ag, LLC	OWN	Not required ³
830.7100	Viscosity	49992102	Tacoma Ag, LLC	OWN	
830.7200	Melting Point/Melting Range	49992103	Tacoma Ag, LLC	OWN	Not required ³
830.7220	Boiling Point/Boiling Range	49992103	Tacoma Ag, LLC	OWN	Not required ³
830.7300	Density/Relative Density/Bulk Density	49992102	Tacoma Ag, LLC	OWN	
830.7370	Dissociation Constants in Water	49992103	Tacoma Ag, LLC	OWN	Not required ³

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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DATA MATRIX

Date August 22, 2016			EPA Reg. No./File Symbol 83520-xx		Page 3 of 12
Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709			Product Tacoma Ag Imidacloprid 4.0		
Ingredient Imidacloprid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7520	Particle size, fiber length, diameter distribution	49992103	Tacoma Ag, LLC	OWN	Not required ⁹
830.7550	Partition Coefficient (n-octanol/water), Shake Flask Method	49992103	Tacoma Ag, LLC	OWN	Not required ³
830.7560	Partition Coefficient (n-octanol/water), Generator Column Method	49992103	Tacoma Ag, LLC	OWN	See 830.7550
830.7570	Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography	49992103	Tacoma Ag, LLC	OWN	See 830.7550
830.7840	Water Solubility: Column Elution Method; Shake Flask Method	49992103	Tacoma Ag, LLC	OWN	Not required ³
830.7860	Water Solubility, Generator Column Method	49992103	Tacoma Ag, LLC	OWN	Not required ³
830.7950	Vapor Pressure	49992103	Tacoma Ag, LLC	OWN	Not required ³
870.1100 (81-1)	Acute Oral Toxicity: Rat	Cite-All		PAY	
870.1200 (81-2)	Acute Dermal Toxicity: Rat	Cite-All		PAY	
870.1300 (81-3)	Acute Inhalation Toxicity: Rat	Cite-All		PAY	
870.2400 (81-4)	Primary Eye Irritation: Rabbit	Cite-All		PAY	

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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DATA MATRIX

Date August 22, 2016

EPA Reg. No./File Symbol 83520-xx

Page 4 of 12

Applicant's / Registrant's Name & Address

Tacoma Ag, LLC
PO Box 14073
Durham, NC 27709

Product

Tacoma Ag Imidacloprid 4.0

Ingredient Imidacloprid

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
870.2500 (B1-5)	Primary Dermal Irritation	Cite-All		PAY	
870.2600 (B1-6)	Dermal Sensitization	Cite-All		PAY	
Product Specific Data Requirements					
Tacoma Ag, LLC is using the cite-all option under the selective method to satisfy acute toxicity data requirements. Tacoma Ag, LLC has made offers-to-pay to the following companies on the June 30, 2016 Data Submitters List for imidacloprid.					
		Cite-All	Syngenta Crop Protection, LLC	PAY	
		Cite-All	Nufarm Americas, Inc.	PAY	
		Cite-All	The Scotts Company D/B/A The Ortho Group	PAY	
		Cite-All	Bayer CropScience LP	PAY	
		Cite-All	FMC Corporation	PAY	
		Cite-All	E.I. DuPont de Nemours and Company	PAY	

Signature



Name and Title

Michael Kellogg, Consultant

Date

8/22/16

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DATA MATRIX

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Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709		Product Tacoma Ag Imidacloprid 4.0			
Ingredient Imidacloprid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	Macdermid Agricultural Solutions, Inc.	PAY	
		Cite-All	Bayer Environmental Science	PAY	
		Cite-All	Monsanto Company	PAY	
		Cite-All	The Scotts Company	PAY	
		Cite-All	Cleary Chemicals, LLC	PAY	
		Cite-All	McLaughlin Gormley King Company D/B/A MGK	PAY	
		Cite-All	PBI/Gordon Corp.	PAY	
		Cite-All	Sergeant's Pet Care Products, Inc.	PAY	
		Cite-All	The Hartz Mountain Corporation	PAY	
		Cite-All	Koppers Performance Chemicals, Inc.	PAY	
		Cite-All	Bayer Corp.	PAY	
		Cite-All	Helena Chemical Company	PAY	

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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DATA MATRIX

Date August 22, 2016

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Page 6 of 12

Applicant's / Registrant's Name & Address

Tacoma Ag, LLC
PO Box 14073
Durham, NC 27709

Product

Tacoma Ag Imidacloprid 4.0

Ingredient Imidacloprid

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	Gustafson LLC	PAY	
		Cite-All	J.J. Mauget Co.	PAY	
		Cite-All	The Andersons, Inc.	PAY	
		Cite-All	Chemical Specialties Inc.	PAY	
		Cite-All	Bayer Healthcare LLC	PAY	
		Cite-All	Mitsui Chemicals, Inc.	PAY	
		Cite-All	Loveland Products, Inc.	PAY	
		Cite-All	Nufarm Limited	PAY	
		Cite-All	Helena Chemical Company D/B/A Setre Chemical Company	PAY	
		Cite-All	Lanxess Corporation	PAY	
		Cite-All	Albaugh, LLC	PAY	
		Cite-All	Aeroxon Inc.	PAY	
		Cite-All	Control Solutions, Inc.	PAY	
		Cite-All	Nufarm Americas, Inc.	PAY	

Signature



Name and Title

Michael Kellogg, Consultant

Date

8/22/16

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DATA MATRIX

Date August 22, 2016		EPA Reg. No./File Symbol 83520-xx		Page 7 of 12	
Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709		Product Tacoma Ag Imidacloprid 4.0			
Ingredient Imidacloprid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	Valent USA Corporation	PAY	
		Cite-All	Makhteshim Agan of North America, Inc. D/B/A ADAMA	PAY	
		Cite-All	Spray Drift Task Force	OWN	See endnote ¹⁰
		Cite-All	Cheminova, Inc.	PAY	
		Cite-All	Mycogen Seeds	PAY	
		Cite-All	Arborsystems, Inc. D/B/A Arbor Systems	PAY	
		Cite-All	Pet Logic, LLC	PAY	
		Cite-All	Repar Corp.	PAY	
		Cite-All	United Phosphorus, Inc.	PAY	
		Cite-All	Sulphur Mills, Ltd.	PAY	
		Cite-All	Nufarm, Inc.	PAY	
		Cite-All	ISK BioSciences Corporation	PAY	
		Cite-All	Outdoor Residential Exposure Task Force	OWN	See endnote ¹¹

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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DATA MATRIX

Date August 22, 2016		EPA Reg. No./File Symbol 83520-xx		Page 8 of 12	
Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709		Product Tacoma Ag Imidacloprid 4.0			
Ingredient Imidacloprid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	Agricultural Reentry Task Force	OWN	See endnote ¹²
		Cite-All	Bayer Advanced	PAY	
		Cite-All	Agrisel USA, Inc.	PAY	
		Cite-All	Scimetrics, Ltd. Corporation	PAY	
		Cite-All	Zelam Ltd.	PAY	
		Cite-All	Rockwell Labs Ltd D/B/A Maggie's Farm Ltd.	PAY	
		Cite-All	Sapstain Industry Group	PAY	
		Cite-All	Univar Environmental Sciences	PAY	
		Cite-All	Innovative Pest Control Products	PAY	
		Cite-All	FIFRA Endangered Species Task Force	PAY	
		Cite-All	Arborjet, Inc.	PAY	

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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DATA MATRIX

Date August 22, 2016	EPA Reg. No./File Symbol 83520-xx	Page 9 of 12
Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709	Product Tacoma Ag Imidacloprid 4.0	

Ingredient Imidacloprid


Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	Rainbow Treecare Scientific Advancements	PAY	
		Cite-All	Residential Exposure Joint Venture (REJV)	PAY	
		Cite-All	Agricultural Handler Exposure Task Force	OWN	See endnote ¹³
		Cite-All	Arch Treatment Technologies, Inc.	PAY	
		Cite-All	Rotam Limited	PAY	
		Cite-All	Sharda CropChem Limited	PAY	
		Cite-All	Ensystex III, Inc.	PAY	
		Cite-All	Rotam Agrochemical Company, Ltd.	PAY	
		Cite-All	Direct Ag Source, LLC	PAY	
		Cite-All	CEVA Animal Health, LLC	PAY	
		Cite-All	Sharda USA LLC	PAY	
		Cite-All	ADAMA Celsius Property B.V.	PAY	

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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DATA MATRIX

Date August 22, 2016		EPA Reg. No./File Symbol 83520-xx		Page 10 of 12	
Applicant's / Registrant's Name & Address <p align="center">Tacoma Ag, LLC PO Box 14073 Durham, NC 27709</p>		Product <p align="center">Tacoma Ag Imidacloprid 4.0</p>			
Ingredient Imidacloprid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	AmTide, LLC	PAY	
		Cite-All	Ensysyex IV, Inc.	PAY	
		Cite-All	Viance, LLC	PAY	
		Cite-All	Dalian Chemphy Chemicals Co., Ltd.	PAY	
		Cite-All	Generic Endangered Species Task Force	OWN	See endnote ¹⁴
		Cite-All	Arcana, LLC	PAY	
		Cite-All	Abamax Chemical LLC	PAY	
		Cite-All	Alpha Scents, Inc.	PAY	
		Cite-All	Lnouvel, Inc.	PAY	
		Cite-All	Willowood, LLC	PAY	
		Cite-All	Willowood Imidacloprid, LLC	PAY	
		Cite-All	Olympus Seed Treatment Formulator, Inc.	PAY	
		Cite-All	Willapa-Grays Harbor Oyster Growers	PAY	
Signature 			Name and Title <p align="center">Michael Kellogg, Consultant</p>		Date <p align="center">8/22/16</p>

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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DATA MATRIX

Date August 22, 2016			EPA Reg. No./File Symbol 83520-xx		Page 11 of 12
Applicant's / Registrant's Name & Address Tacoma Ag, LLC PO Box 14073 Durham, NC 27709			Product Tacoma Ag Imidacloprid 4.0		
Ingredient Imidacloprid					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	Vive Crop Protection, Inc.	PAY	
		Cite-All	Liberty Crop Protection, LLC	PAY	
		Cite-All	SHP Chemical Inc.	PAY	
		Cite-All	Shanghai Neway Animal Health Co., Ltd.	PAY	
		Cite-All	Promika, LLC	PAY	
		Cite-All	CAP IM Supply, Inc.	PAY	
		Cite-All	Evergreen Animal Health, LLC	PAY	
Imidacloprid Generic Data Requirements					
Tacoma Ag Imidacloprid 4.0 qualifies for Formulator's Exemption for imidacloprid generic data requirements.					

Signature 	Name and Title Michael Kellogg, Consultant	Date 8/22/16
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Endnotes for Data Matrix for Tacoma Ag Imidacloprid 4.0

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- ¹ **830.1620** - Per OPPTS 830.1000, these data are not required for the registration of an end-use product. See 830.1650 for formulation process information.
- ² **830.1700** - This product does not consist solely of the technical grade active ingredient (TGAi) and is not produced by an integrated system, therefore, per OPPTS 830.1700, these data are not required.
- ³ **830.6313, 830.7050, 830.7200, 830.7220, 830.7370, 830.7550, 830.7560, 830.7570, 830.7840, 830.7860 and 830.7950** - Per OPPTS 830.1000, these data are not required for the registration of an end-use product.
- ⁴ **830.6315** - Tacoma Ag Imidacloprid 4.0 contains no flammable ingredients, therefore these data are not required. Please refer to the Confidential Statement of Formula for additional information on the composition of Tacoma Ag Imidacloprid 4.0.
- ⁵ **830.6316** - This product does not have explosive characteristics; therefore these data are not required. Please refer to the Confidential Statement of Formula for additional information on the composition of Tacoma Ag Imidacloprid 4.0.
- ⁶ **830.6317, 830.6320 - Storage Stability and Corrosion Characteristics:** Tacoma Ag, LLC is currently conducting storage stability and corrosion characteristic studies to satisfy guidelines 830.6317 and 830.6320, respectively. Per PR Notice 92-5, storage stability data are not required to be submitted unless specifically requested by the Agency. OPPTS 830.6317 and 830.6320 guidelines allow the corrosion characteristics study and storage stability study to be conducted simultaneously. Tacoma Ag, LLC will submit these data upon completion. Tacoma Ag, LLC requests that a conditional registration for Tacoma Ag Imidacloprid 4.0 be granted on the submission of these data.
- ⁷ **830.6319** - Tacoma Ag Imidacloprid 4.0 is not an emulsifiable concentrate. In addition, the proposed labeling recommends dilution with water, not oil; therefore, these data are not required.
- ⁸ **830.6321** - This product is not proposed for use around electrical equipment. Therefore, these data are not applicable nor are these data required.
- ⁹ **830.7520** - These data are not required for Tacoma Ag Imidacloprid 4.0 because it is not water insoluble and is not a fibrous material.
- ¹⁰ Tacoma Ag is an affiliate member of the Spray Drift Task Force (SDTF). A letter of authorization for reliance on SDTF data can be provided upon request.
- ¹¹ Tacoma Ag is an affiliate member of the Outdoor Residential Exposure TF (ORETF). A letter of authorization for reliance on ORETF data can be provided upon request.
- ¹² Tacoma Ag is an affiliate member of the Agricultural Reentry Task Force (ARTF). A letter of authorization for reliance on ARTF data can be provided upon request.
- ¹³ Tacoma Ag is an affiliate member of the Agricultural Handlers Exposure Task Force (AHETF). A letter of authorization for reliance on AHETF data can be provided upon request.
- ¹⁴ Tacoma Ag is an affiliate member of the Generic Endangered Species Task Force (GESTF). A letter of authorization for reliance on GESTF data can be provided upon request.

